

PROJECT MANUAL

PROJECT NAME AND LOCATION:

**FIRE ALARM SYSTEM UPGRADE
MEADOWBROOK APARTMENTS**

Contract Number: DW2302831

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INVITATION TO BID

King County Housing Authority (KCHA) will accept bids from qualified general contractors to furnish labor, materials and necessary equipment to perform the following:

SCOPE OF WORK: Work includes, but is not limited to, removal of existing fire alarm control panel and all devices and replace with new fire alarm control panel and other tasks as described in the bid documents.

PROJECT MANUAL DISTRIBUTION:

Address: King County Housing Authority, 600 Andover Park, Seattle, WA 98188
Distribution: * **Documents are available for download on KCHA's website at <http://www.kcha.org/business/construction/open/>**

PRE-BID CONFERENCE:

Date and Time: May 9, 2023 at 11:00 A.M.
Jobsite Address: Meadowbrook Apartments, 1408 NW Richmond Beach Road, Shoreline, WA 98177.
In Addition: Contractors are strongly encouraged to attend the Pre-Bid Conference. Failure to attend the Conference will not relieve the Contractor of any responsibility for information provided at that time.
For Questions: Questions pertaining to the bid are to be sent via email to MichelleJ@kcha.org no later than seven (7) calendar days prior to bid due date. All responses shall be in the form of Addenda.
Posting: Addenda will be posted on KCHA's website.

BIDS ARE DUE:

Time: **2:00 P.M.**
Date: **May 25, 2023**

Submittal Process: * Bids may be sent to Michelle Jackson via email to MichelleJ@kcha.org.
Process: All Bids must be received by KCHA no later than the above due date and time. No Bids will be accepted after that date and time.

BID GUARANTEE:

Amount: Five (5%) Percent of the Total bid must accompany Each Bid
Payable to: King County Housing Authority

PERFORMANCE AND PAYMENT BONDS: As a condition of award Performance and Payment bonds for 100% of the Contract Award Amount shall be furnished for the Work.

KCHA is an Equal Employment Opportunity Employer and strongly encourages minority-owned and women-owned businesses, socially and economically disadvantaged businesses, and small businesses to submit bids or to participate as subcontractors and suppliers on KCHA Contracts.

KCHA reserves the right to reject any or all bids or to waive any informality in the bidding. No bid shall be withdrawn for a period of 60 calendar days subsequent to the opening of the bids without the written consent of KCHA.

CONTACT PERSON: Michelle Jackson at MichelleJ@kcha.org

SPECIFICATIONS

**Fire Alarm System Upgrade
Meadowbrook Apartments**

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SECTION 01100 - SUMMARY

PART 1 - GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification: Fire Alarm System Upgrades
- B. Project Location: Meadowbrook Apartments, 1408 NW Richmond Beach Road, Shoreline, WA 98177
 - 1. BASE BID: Building 1410 ONLY, Plans include all four buildings but only 1410 is included in this contract bid.
 - a. 1410-29 Apartments: 8 @ 1BR, 18 @ 2 BR & 3 @ 3 BR.
 - 2. ADD/ALTERNATE: Add three additional buildings to the base bid so all four buildings are included. This ADD/ALTERNATE should include all the fire alarm system upgrades as shown in the plans for 1404, 1406 & 1408. Note: 1404 & 1408 have recently installed main panels that will only need to be re-programmed, not replaced.
 - a. 1404-29 Apartments: 8 @ 1BR, 19 @ 2 BR & 2 @ 3 BR.
 - b. 1406-29 Apartments: 8 @ 1BR, 19 @ 2 BR & 2 @ 3 BR.
 - c. 1408-30 Apartments: 10 @ 1BR, 17 @ 2 BR & 3 @ 3 BR, includes office.
- C. Work includes but is not limited to:
 - 1. Removal of existing fire alarm control panels as noted and all devices shown in the plans.
 - 2. Provide a new fire alarm control panels as noted and all devices as listed.

NOTE: The quantities and device counts are an estimated value. Bidder responsible to verify all dimensions and quantity take-offs prior to submitting bid. Owner assumes no responsibility for quantities.

1.2 WORK SEQUENCE

- A. The Work shall be completed in 60 calendar days from the date of Notice to Proceed for BASE BID.
- B. The Work shall be completed in 120 additional calendar days for a total of 180 calendar days from the date of Notice to Proceed for ADD/ALTERNATE.
- C. It is anticipated the plan preparations and permit process will take 90-120 days. NTP to be issued after the permits are approved and materials are available.
- D. Contractor will submit written schedule at time of NTP outlining dates and duration

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of job including start date and anticipated final completion date.

1.3 LIQUIDATED DAMAGES

- A. Liquidated damages will be assessed for each calendar day that the Contractor exceeds the time for completion in the amount of \$250.

1.4 WORK RESTRICTIONS

A. Use of the Premises

- 1. Use of Site: Limit use of premises to work areas. Do not disturb portions of site beyond areas in which the Work is indicated.
 - a. Owner Occupancy: Allow for resident occupancy of site. Owner will occupy site and existing building during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate resident usage.
 - b. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to residents and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
- 2. Use of Existing Building: Maintain existing building in a weathertight condition throughout construction period. Repair damage caused by construction operations. Protect property, the buildings and occupants during construction period.

B. Occupancy Requirements

- 1. Full Owner Occupancy: Owner and tenants will occupy site and existing building during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner and tenant usage. Perform the Work so as not to interfere with Owner's operations.

1.5 PERMITS

- A. Contractor is responsible for obtaining and paying for all permits and for the coordination of all required inspections.
- B. Prepare and file necessary plans, including floor plans, prepare documents and obtain necessary approvals of Authorities Having Jurisdiction (AHJ). Obtain required certificates of inspection for work and deliver to the Owner before request for acceptance and final payment for the work.

1.6 CONTRACT MODIFICATION PROCEDURES

- A. Owner-Initiated Proposal Requests: Owner will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

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- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change.
- C. Construction Change Directive: Owner may issue a Construction Change Directive instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- D. Documentation: Maintain detailed records required for a change order to be approved and provide evidence of the following:
 - 1. Wage Rates
 - 2. Hours worked for each trade
 - 3. Materials
 - 4. Equipment
- E. Do not perform change order Work without approval of the Owner. Work performed without approval will not be compensated.

1.7 PAYMENT PROCEDURES

- A. Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
- B. Each Application for Payment shall be consistent with previous applications and payments.
- C. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
- D. Waivers of Lien: With each Application for Payment, submit conditional waivers lien from every entity that is lawfully entitled to file a lien arising out of the Contract and related to the Work covered by the payment.
 - 1. Submit partial waivers on each item for amount requested, before deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - a. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
- E. Final Payment Application: Submit final Application for Payment with releases and close out supporting documentation.

1.8 PROJECT MEETINGS

- A. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner, but no later than 7 days after execution of the Agreement.
- B. Progress Meetings: Conduct progress meetings at weekly intervals.

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1.9 SUBMITTALS

- A. Provide product data for each element of construction and type of product or equipment for approval by Authority having Jurisdiction (AHJ) and Owner.
- B. Subcontract list. Prepare written information that demonstrates capabilities and experience of firm or persons.
- C. Contractors project manager and/or supervisors. Prepare written information that demonstrates capabilities and experience of firm or persons.
 - 1. The Owner will review subcontractors and assigned staff and will accept or reject based on experience or qualifications.
- D. Follow Washington Industrial Safety and Health Act (WISHA) regional directives and provide a site-specific safety program that will require an accident prevention and hazard analysis plan for the contractor and each subcontractor on the work site. The Contractor shall submit a site-specific Accident Prevention Program (APP) to the Owner's representative prior to the initial scheduled construction meeting.

1.10 TEMPORARY FACILITIES

- A. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
- B. Barricades, Warning Signs and Lights: Comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics and warning signs to inform personnel and the public of the hazard being protected against.
- C. Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.
- D. Four parking spaces shall be available to the contractor for storage containers and parking. Do not park in marked tenant spaces.

1.11 CONSTRUCTION WASTE MANAGEMENT

- A. Regulatory Requirements: Conduct construction waste management activities in accordance with State of Washington RCW 39.04.13, and all other applicable laws and ordinances.
- B. Performance Requirements
 - 1. General: Where possible divert CDL waste from the landfill by one, or a combination of the following activities: Salvage, Reuse, Source-Separated CDL Recycling, Co-mingled CDL Recycling.

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- C. Removal of Construction Waste Management
 - 1. Remove CDL waste materials from project site on a regular basis. Do not allow CDL waste to accumulate on-site.
- D. Transport CDL waste materials off Owner's property and legally dispose of them.
 - 1. Burning of CDL waste is not permitted.

1.12 EXECUTION REQUIREMENTS

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.

1.13 CUTTING AND PATCHING

- A. Quality Assurance
 - 1. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
 - 2. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Owner's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- B. Performance
 - 1. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 2. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.
 - a. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - b. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

1.14 DEMOLITION

- A. Hazardous Materials: Materials containing hazardous materials are included in the Limited Asbestos Survey Report prepared by PBS and dated November 2011 which is included.
 - 1. All material disturbed as part of the renovation shall be removed and disposed of in accordance with Washington State regulations.
 - 2. If other materials not included in the report are suspected of containing hazardous materials are encountered, do not disturb and immediately notify Owner.

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- B. All hazardous materials shall be removed and disposed off site in accordance with state and local requirements.

1.15 CLOSEOUT PROCEDURES

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
 - 1. Prior to acceptance of the work at each building, clean project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
- B. Prior to final acceptance and final payment, Contractor shall submit a written warranty covering labor and materials for a period of one (1) year from final completion.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01100

SECTION 28 05 13
CONDUCTORS AND CABLES FOR ELECTRONIC SAFETY AND SECURITY

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes:
1. Control Wiring
 2. Communication and Signal Wiring
 3. Wire Lubricated Compound
 4. Electrical Metallic Tubing and Fittings
 5. Interior Conduit

1.02 RELATED SECTIONS

- A. Division 01, General Requirements
B. Section 28 30 00 Fire Detection and Alarm

1.03 SUBMITTALS

- A. Submit the following:
1. Manufacturer's Literature and Data: Showing each cable type and rating.
 2. Certificates: Two weeks prior to final inspection, deliver to the Owner four copies of the certification that the material is in accordance with the drawings and specifications and has been properly installed.
 3. Shop Drawings:
 - a. Size and location of panels and pull boxes.
 - b. Size and location of fire-rated penetration devices.
 - c. Layout of required conduit penetrations through structural elements.
 - d. Identify the specific item proposed and its area of application on the catalog cuts.

1.04 REFERENCES

- A. References listed below form a part of this specification to the extent referenced. Publications are referenced in the text by the basic designation only.
1. ASTM: American Society of Testing Material
 - a. ASTM D2301-04 Standard Specification for Vinyl Chloride Plastic Pressure Sensitive Electrical Insulating Tape
 2. Federal Specifications
 - a. A-A-59544-00 Cable and Wire, Electrical (Power, Fixed Installation)
 3. NFPA: National Fire Protection Association
 - a. NEC 70-05 National Electrical Code
 4. UL: Underwriters Laboratories, Inc.
 - a. UL 44-02 Thermoset-Insulated Wires and Cables
 - b. UL 83-03 Thermoplastic-Insulated Wires and Cables
 - c. UL 467-01 Electrical Grounding and Bonding Equipment
 - d. UL 486A-01 Wire Connectors and Soldering Lugs for Use with Copper

Conductors

- e. UL 486C-02 Splicing Wire Connectors
- f. UL 486D-02 Insulated Wire Connector Systems for Underground Use or inDamp or Wet Locations
- g. UL 486E-00 Equipment Wiring Terminals for Use with Aluminum and/orCopper Conductors
- h. UL 493-01 Thermoplastic-Insulated Underground Feeder and BranchCircuit Cable
- i. UL 514B-02 Fittings for Cable and Conduit
- j. UL 1479-03 Fire Tests of Through-Penetration Fire Stops

PART 2 PRODUCTS

2.01 CONTROL WIRING

- A. Power and control wiring, except the minimum size not less than 14 AWG, unless otherwise specified in other sections of these specifications.
- B. Large enough the voltage drop under inrush conditions does not adversely affect operation ofthe controls.

2.02 COMMUNICATION AND SIGNAL WIRING

- A. Conform to the recommendations of the manufacturers of the communication and signalsystems; however, not less than what is shown.
- B. Wiring shown is for typical systems. Provide wiring as required for the systems beingfurnished.
- C. Multi-Conductor Cables: color-coded.

2.03 WIRE LUBRICATING COMPOUND

- A. Suitable for the wire insulation and conduit it is used with, and will not harden or becomeadhesive.
- B. Do not use on wire for isolated type electrical power systems.

2.04 ELECTRICAL METALLIC TUBING AND FITTINGS

- A. Type EMT: Electrogalvanized steel tubing.
- B. Fittings and Conduit Bodies:
 - 1. General: In-line straight-through steel or malleable iron fittings and Type C conduitbodies only; do not use bends or tees.
 - 2. Wet Areas: Steel compression-type couplings and nipples.
 - 3. Dry Areas: Set screw-type couplings and nipples.
 - 4. Bonding Locknuts: Malleable iron with set screws and lug screws.
 - a. Insulated Bushing: Malleable iron with integral insulated throat, rated for302 degrees F.
 - b. Bonding and Grounding Bushing: Malleable iron with integral insulated throat, ratedfor 302 degrees F, with solderless lugs or lug screws.

2.05 INTERIOR CONDUIT

- A. Flexible Metal Conduit:

1. Not permitted for interior application.
- B. Surface Raceways:
 1. Use with prior direction from Architect.
 2. Sheet metal channel with fitted cover, suitable for use as surface metal raceway.
 3. Install as reflected in the contract documents
 4. Provide fittings, elbows, and connectors designed for use with raceway system.
 5. Color: Ivory
- C. Junction And Pull Boxes:
 1. Interior Boxes: Fasten covers using security screws.
 - a. Sheet Metal Outlet Boxes:
 - 1) Sizes to be determined in accordance with code requirements for conductor fill.
 - 2) No box smaller than a single gang 1-1/2-inches deep.
 - 3) Provide box covers as required and fasten using security screws.

PART 3 EXECUTION

3.01 GENERAL INSTALLATION

- A. Splice cables and wires only in outlet boxes, junction boxes, or pull boxes.
- B. Seal cable and wire entering a building from underground, between the wire and conduit where the cable exits the conduit, with a non-hardening approved compound.
- C. Wire Pulling:
 1. Provide installation equipment that will prevent the cutting or abrasion of insulation during pulling of cables.
 2. Use ropes made of nonmetallic material for pulling feeders.
 3. Attach pulling lines for feeders by means of either woven basket grips or pulling eyes attached directly to the conductors, as approved by the Resident Engineer.
 4. Pull in multiple cables together in a single conduit.

3.02 CONTROL, COMMUNICATION AND SIGNAL WIRING INSTALLATION

- A. Install wiring and connect to equipment/devices to perform the required functions as shown and specified, unless otherwise specified in other Sections.
- B. Install a separate power supply circuit for each system so that malfunctions in the system will not affect other systems, except where otherwise required,
- C. Connect the systems to the nearest panelboards of suitable voltages, which are intended to supply such systems and have suitable spare circuit breakers or space for installation.
- D. Install a red warning indicator on the handle of the branch circuit breaker for the power supply circuit for each system to prevent accidental de-energizing of the systems.
- E. System Voltages: 120V or lower where shown on the drawings or as required by the NEC.

3.03 CONTROL, COMMUNICATION AND SIGNAL SYSTEM IDENTIFICATION

- A. Install a permanent wire marker on each wire at each termination.
- B. Identifying numbers and letters on the wire markers correspond to those on the wiring diagrams used for installing the systems.
- C. Wire markers retain their markings after cleaning.

END OF SECTION 28 05 13

SECTION 28 30 00
FIRE DETECTION AND ALARM

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. General: Furnish and install new fire alarm panels, NAC power modules, signal and notification devices as required for fire marshal and jurisdictional approvals.
 - 1. The provided drawings are schematic; Contractor responsibility to determine device counts and layout as required by the City of Bellevue Fire Marshal
- B. Permitting: submit, secure and final permits and jurisdictional approvals from
 - 1. City of Bellevue
- C. Fire Alarm system
 - 1. Basis of Design – Silent Knight with no substitutions
 - 2. Components: Silent Knight compatible signal and notification devices:
 - a. Strobe Synchronization
 - b. Remote Equipment
 - c. Detection Devices
 - d. Manual Pull Stations
 - e. Annunciation Devices
 - f. Addressable Accessories
 - g. Controlled Devices
 - h. Cable
 - i. Pictogram
- D. ***Fire Alarm system Monitoring***
 - 1. Prepay Owner approved monitoring company for one-year of fire alarm monitoring
 - 2. Respond to fire alarm system issues during first year of monitoring
 - 3. End user to assume contract and extend service after first year

1.02 RELATED SECTIONS

- A. Division 01, General Requirements
- B. Hazardous Materials Survey
- C. Section 28 05 13 Conductors and Cables for Electronic and Security

1.03 SUBMITTALS

- A. Shop drawings produced in AutoCAD with Fire Marshal's stamp of approval.
- B. Product data with wiring schematics.
- C. AutoCAD wiring diagrams of each type of device.
- D. AutoCAD riser diagram of the complete systems.
- E. Battery and voltage drop calculations based on intended routing and wiring.

- F. Prepare shop drawings of the system by the manufacturer in AutoCAD and submitted to the Fire Marshal for approval. The approved shop drawings will be utilized as the installation drawings. The shop drawings show actual conduit routing and conductors as to be installed. Update drawings to include revisions and changes to the system during construction and installation.

1.04 QUALITY ASSURANCE

- A. Approve and install equipment in accordance with NFPA, ADA and IBC requirements and UL listed both in individual components and as a system. ISO-9000 certified; UL and FM listed and meet NFPA 72.
- B. Furnish evidence that there is an experienced and efficient service organization which carries stock of repair parts for the system to be furnished and that the organization is cable of providing repair services within 24 hours of a trouble call.
- C. Install system by an electrical contractor experienced in the installation of addressable fire alarm systems and certified by the national institute for certification in engineering technologies (NICET) for fire alarm systems. Control equipment factory representative services be obtained to provide engineered system floor plans and point-to-point drawings on AutoCAD. Representative to supervise the installation, system start-up, programming, make final adjustments and provide testing of the completed system. The factory representative provides a letter of system certification to the Architect.

1.05 CONTRACTOR DESIGN

- A. Provide a complete fire alarm and communications system as needed to meet applicable codes and requirements under this section.
- B. Provide devices if needed to comply with the requirements of NFPA 72.
- C. Raceway, routing, and wiring for field devices are not shown on the drawings except for a few specific design requirements.
- D. Submit documents after design has been approved by Authority Having Jurisdiction (AHJ).
 - 1. The fire alarm system shall be designed by a NICET Fire Alarm Systems Level IV engineering technician.
 - 2. The designer is responsible for understanding the construction of the building to take in consideration ceiling heights, ceiling construction (flat or not flat), and other features of the building that will affect the layout of devices as required to provide a fire alarm system that is fully compliant with NFPA 72.
 - 3. If required by state regulations, a Professional Fire Protection Engineer shall seal drawings submitted to the AHJ.
- E. Noted that ceiling and wall finishes in occupied rooms contain asbestos; contractor responsibility to comply with all worker safety and disposal jurisdictional requirements.
- F. Field Quality Control:
 - 1. Manufacturer's field services: Provide service by a factory-authorized and

- certified service representative to supervise field assembly and connection of components and pre-testing, testing, and adjustment of system.
2. Pre-testing: Determine, through pre-testing, conformance of system to requirements of drawings and specifications. Correct deficiencies observed in pre-testing. Replace malfunctioning or damaged items with new and retest until satisfactory performance and conditions are achieved.
 - a. Inspect equipment installation, interconnection with system devices, mounting locations, and mounting methods.
 - b. Verify that units and controls are properly installed, connected, and labeled and that interconnecting wires and terminals are identified.
- G. Authority Having Jurisdiction (AHJ) review:
1. Concurrent or prior to submission to Engineer, submit shop drawing and product data to Authority Having Jurisdiction (AHJ).
 2. Upon receipt of comments from AHJ, make resubmissions, if required, to make clarifications or revisions to obtain approval.
 3. The AHJ shall witness final testing and inspection in order to obtain final approval for system
- H. Operate automatic fire detection systems in a local, supervised non-coded fashion. The system low voltage operating at 24V DC, fully addressable with analog technology for sensors. Signal circuits either class A or B without changing modules. Design system Class B. Load circuits to 75 percent capacity maximum.
- I. Signal, visual, and audible alarms, flow and tamper module circuits supervised for opens, shorts and grounds. Open, short or ground causes a trouble on the system, sound the audible trouble sounder and annunciate at the control and remote annunciator: the device, location, and nature of the trouble condition.

1.06 SYSTEM OPERATION

- A. Operation of manual or automatic initiating device cause an audible and visual alarm to sound, activate the control-by-event program and perform auxiliary functions.
- B. Annunciate fault in the circuits at the control panel and the remote annunciators.
- C. Utilize a single pair of wires to power, transmit, and receive data from the addressable analog initiating devices and to transmit commands to the remote-control points.
- D. Basic Performance:
 1. Signal Line Circuits (SLC) shall be wired Class B (NFPA Style 4).
 2. Notification Appliance Circuits (NAC) shall be wired Class B.
 3. Each SLC and NAC shall be limited to only 80 PCT of its total capacity at the time of initial installation.
 4. Fire alarm system and all associated equipment and devices shall be suited to the environment in which it is installed, e.g. in a hazardous areas all equipment shall be appropriately rated as explosion-proof, intrinsically safe, etc.

1.07 SEQUENCE OF OPERATION

- A. The system alarm operation subsequent to the alarm activation of manual station, automatic initiating device, or sprinkler flow/pressure switch is to be as follows:
 - 1. Audible alarm indicating appliances sound a digitized tone until silenced by the alarm silence switch at the control panel.
 - 2. Visual alarm indicating appliances (xenon strobes) display a continuous pattern until extinguished by the alarm silence switch.
 - 3. Doors normally held open by door control devices release. Signal door lock systems to unlock.
 - 4. A supervised signal to notify an approved central station to activate.
 - 5. Combination fire/smoke dampers de-energize to normally closed position.
- B. Alarm activation of elevator lobby, hoistway, or machine room smoke or heat detector in addition to the operations listed above, cause the elevator cab to be recalled according to the following sequence:
 - 1. If the alarmed detector is on another floor other than the preferred level of egress, recall elevator cab to the preferred level of egress.
 - 2. If the alarmed detector is on the main egress level, the elevator cabs recalled to the predetermined alternate recall level as determined by the local authority having jurisdiction.
 - 3. The activation of heat detector in an elevator hoistway or machine room automatically disconnect power to the elevator motor via base-mounted contacts activating the elevator feeder shunt-trip circuit breaker. Refer to drawings.
- C. Control panel has a dedicated supervisory service indicator and a dedicated supervisory service acknowledge switch.
- D. The activation of standpipe or sprinkler valve tamper switch activates the system supervisory service audible signal and illuminate the indicator at the control panel.
 - 1. Activating the supervisory service acknowledge switch will silence the supervisory audible signal while maintaining the supervisory serviced LED on indicating the tamper contact is still in the off-normal state.
 - 2. Restoring the valve to the normal position causes the supervisory service indicator to extinguish thus indicating restoration to normal position.
- E. The activation of sprinkler pre-action system pressure or low air switch activates the system supervisory service audible signal and illuminate the indicator at the control panel.
 - 1. Activating the supervisory service acknowledge switch will silence the supervisory audible signal while maintaining the supervisory service indicator on indicating the pressure/air contact is still in the off-normal state.
 - 2. Restoring the air pressure to the normal causes the supervisory service indicator to extinguish thus indicating restoration to normal position.
- F. Immediately display alarm and trouble conditions on the control panel front

alphanumeric display and of remote annunciators. If more alarms or troubles are in the system the operator may scroll to display new alarms.

- G. Alarm list key that will allow the operator to display alarms, troubles, and supervisory service conditions with the time of occurrence.
- H. In normal operation, fire alarm system close combination fire/smoke dampers when corresponding fan system is OFF. Fire alarm system open combination fire/smoke dampers when corresponding fan system is ON.

1.08 CONNECTION TO EXISTING NETWORK

- A. General: Communication between peer-to-peer fire alarm control panels via TCP/IP over existing Ethernet, RS-485, RS-232 or other previously established panel system communication protocol.
- B. Provide hardware, software and system integration to seamlessly integrate to the existing server for common system graphics, alarming, paging out of alarms via existing system.
- C. Provide upgrade to existing control monitoring to accept new alarm points.

1.09 Warranty

- A. Warrant all products supplied and installed to be free from defects in material and workmanship starting on the date and for the duration of the period for 12 months. Warranty calls for technicians are covered during normal working hours Monday through Friday. Labor for after hours and weekend call out will be charged at our preferred customer discount rate.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. FACP: Silent Knight; SK-6820; or as required to meet coverage requirements and outlined in Division 1.
 - 1. No exceptions allowed
- B. Non-system fire alarm devices
 - 1. Kiddie or Firex

2.02 GENERAL

- A. Furnish labor, materials, and equipment required for a complete and operating system of manual and automatic initiating devices, control panels, auxiliary relays, power supplies with batteries and accessories necessary to accomplish the desired sequence of events.
- B. Fully electronic and addressable systems as described below with monitoring and annunciation of system alarms and troubles.
- C. All detection and initiation devices compatible with specified manufacturer.

2.03 STROBE SYNCHRONIZATION

- A. Synchronize strobes to 1Hz flash to comply with the Americans with Disabilities Act (ADA).

2.04 REMOTE EQUIPMENT

- A. Annunciator Control Panels: Alphanumeric display module:
 - 1. 80 character LED/LCD display, back lighted.
 - 2. System acknowledge, signal silence, and system reset touchpad control switches.
 - 3. Time/date display.
 - 4. Integral sounder with subsequent alarm/trouble resound.
 - 5. Flush mounting.
- B. Transponders:
 - 1. Up to 26 field configurable circuits of any mix.
 - 2. Full LED/LCD display of alarm and trouble per point.
 - 3. Status displays and controls including power, on-line, local alarm and local troubleLED/LCD's plus reset and lamp test switches.
 - 4. Power supply, charger and battery as required for control panel.
- C. Lamp Driver Modules:
 - 1. Field selectable alarm and trouble or alarm only.
 - 2. Integral system trouble lamp on-line/power LED/LCD, alarm and trouble resound with flash function of new events, serial RS-485 interface to control panel, capable of being powered remotely or locally with supervision.
 - 3. Integral lamp test function.
- D. Power supplies, with integral chargers and batteries current limited low energy as recommended by the manufacturer but sized for 25 percent spare capacity.

2.05 DETECTION DEVICES

- A. Analog photoelectric smoke detectors provide for individual addressing of each detector. Sensor is constantly monitored to measure change in its sensitivity due to the environment caused by dirt, aging, temperature, humidity, etc.
- B. Give an advanced indication to the control panel of the need for maintenance and can be specific as to where the maintenance is needed. It is to be mounted on a two wire standard device base. Photoelectric detectors located within the elevator shaft rated for installation within a pressurized shaft.
- C. Duct smoke detector housing assemblies accommodate the mounting of an analog/addressable detector along with a standard, relay or isolator detector mounting base. Housing protects the measuring chamber from damage and insects. Utilize an air exhaust tube and an air sampling inlet tube that extends into the duct air stream up to twelve feet. Provide drilling templates and gaskets to facilitate locating and mounting the housing.
 - 1. Provide sampling tube length as required to accommodate air duct width.
 - 2. Provide remote status/alarm LED indicator and keyswitch test station for

- each ductsmoke detector.
3. Duct smoke detector air velocity range includes design air velocity of the ductwork inwhich the duct smoke detector is to be installed.
- D. Analog thermal detectors consist of a dual thermistor sensing circuit for fast response. Sensoris continually monitored to measure changes in their sensitivity due to temperature. Advancedindication to the control panel of the need for maintenance and can be specific as to where themaintenance is needed. Mount on a two wire standard device base. Equip thermal detectors in elevator shafts and machine rooms with a set of auxiliary contacts for elevator equipment use. Rate thermal detectors located within elevator shaft for installation within a pressurized shaft.
- E. Projected Beam Type Smoke Detectors:
1. 4-wire 24 VDC and powered from the control panel four-wire smoke power source.
 2. Consists of a separate transmitter and receiver capable of being powered separately ortogether.
 3. Operate in either a short range of 30-feet to 100-feet or a long range of 100-feet to 300-feet.
 4. Feature a bank of four alignment LEDs on both the receiver and transmitter that are usedto ensure proper alignment without the use of special tools.
 5. The beam detector features automatic gain control that compensate for gradual signaldeterioration from dirt accumulation on lenses. Ceiling or wall mount as shown on thedrawings. Carry out testing out using calibrated test filters. Provide a key activated remote test station.
 6. Provide monitor modules for alarm and trouble and control relay module for reset.
- F. Provide addressable monitor modules an address for a single, normally open initiating devicesuch as a waterflow switch, manual station, etc. UL approved to extend the sensor loop to lengths up to 2,500-feet.
- G. Non-System Smoke Detectors: direct wire, battery back-up.

2.06 MANUAL PULL STATIONS

- A. Single action, addressable, constructed of metal construction with a key reset switch forpositive authorized resetting action. The unit to be keyed the same as the control unit.

2.07 ANNUNCIATION DEVICES

- A. Horn and Combination Horn/Strobe:
1. Mount to a recessed box with an extension ring.
 2. Front of the unit allows for candela light levels as required by ADA for the spacing asinstalled.
 3. Horns provide a 100 dba peak sound output with field adjustable output level.
 4. Finish: Match existing finishes in the facility

- B. Strobe Lights:
 - 1. Triangular with FIRE on white plastic lens, polarized 24 VDC, mounting single gang on four square box.
 - 2. Front of the unit allows for candela light levels as required by ADA for the spacing as installed.
 - 3. Strobe candela level adjustable field from 15-110 CD.
 - 4. Mount at 80-inches or as shown on drawings.
 - 5. Finish: Match existing finishes in the facility
- C. The candela rating of each strobe installed apparent to the Fire Marshal and to qualified service personnel either as installed or with the removal of the faceplate. If faceplates are interchangeable between strobes of different ratings the indication of candela rating not on the faceplate.

2.08 ELECTROMAGNETIC DOOR HOLDERS

- A. Equipment consists of an armature contact plate with adjustable pivot mount, install on door. Mount behind the door on the wall or floor a heavy-duty electromagnet, in a durable enclosure.
- B. Fail-Safe operation, loss of power releases the door holder for the door to close.
- C. Unit accepts 12VDC, 24VAC/VDC or 120VAC. Coordinate voltage by the fire alarm system installer/supplier. Circuitry required for the systems operation provided by the system installer.
- D. Door holder equipment of the same manufacturer as the fire alarm system to ensure system compatibility and proper UL compatibility listings.

2.09 ADDRESSABLE ACCESSORIES

- A. Control Modules:
 - 1. Connects to the same loop as the initiating devices and provides a form C relay contact.
 - 2. Program module to transfer from either a trouble or alarm input from any or combination of any addressable device.

2.10 CONTROLLED DEVICES

- A. Mechanical control system for control of air handlers and smoke/fire rated dampers.
- B. Fire protection tamper, flow, dry system and pre-action system.

2.11 CABLE

- A. Plenum rated as recommended by System Manufacturer and the building construction methods.

2.12 PICTOGRAM

- A. Mounted and Glass-framed graphics card showing a one-line of the fire alarm system showing all fire alarm devices and connectivity to the FACP

PART 3 - EXECUTION

3.01 INSTALLATION

A. General:

1. Install in accordance with code, UFC, UBC, NFPA 72, 101 and the manufacturer's instructions.
2. Review proper installation of each type of device with manufacturer's agent.
3. Install wiring, raceway and outlet boxes required for a complete system as indicated in the Contract Documents.
4. Comply with applicable requirements of Section 28 05 13, Raceways and Boxes for Electrical Systems, for boxes and surface mounted raceways.

B. Typical Wiring:

1. Install manufacturer's recommended listed cable to connect devices as recommended by the manufacturer.
2. Run cable in conduit where exposed to physical damage.

C. Detectors:

1. Locate 48-inches clear of supply air vents and 12-inches clear of lights and sprinkler heads.
2. Install detector heads not more than two weeks prior to substantial completion. Verify the design locations shown conform to the actual construction.
3. Do not locate detectors in close proximity to air supply vents.
4. Bring cases of uncertain applicability to the attention of the Architect for resolution prior to roughing in.

D. Duct Smoke Detectors

1. Provide/maintain working access to duct smoke detectors.
2. Locate duct smoke detectors in accordance with code requirements. Locations must ensure adequate airflow within the duct housing.
3. Locate remote status/alarm LED indicator and keyswitch test station at readily accessible location out of general view directly below duct smoke detector location. Identify locations on fire alarm shop drawings prior to installation.

E. Provide auxiliary power supplies as required and extend the 120V power to the power supplies as required and per NEC.

F. Provide visual devices and alarm devices as required. Device locations are diagrammatic showing intent of area coverage. The exact placement, sound or light level is to be per the requirements and the listing of the manufacturer's equipment.

G. Raceways and Boxes

1. Install all wiring in raceways and all devices in boxes:
2. In unfinished areas, exposed fire alarm conduit shall be red in color.
3. All boxes are to be red in color (either painted or a manufacturer's red box).

H. Install all components as indicated and in accordance with manufacturer's wiring diagrams, instructions, and recommendations.

- I. Make all fire alarm wiring continuous from terminal to terminal or from terminal to device pigtail lead.
 - 1. Circuit splices not permitted.
 - 2. Wiring joints, only when required at device pigtail leads shall utilize insulated conical spring connector.
- J. Color coding or other identification is required for all fire alarm wiring.

3.02 LABELING

- A. Label fire alarm control and NAC panels with 1/2-inch by 1-inch phenolic nameplates, indicating control panel point designation. Locate nameplates in the vicinity of the device as approved by the Owner.
- B. Provide Brady type wire markers to identify conductors at each junction or terminal. Use numbers indicated on the wiring diagrams.

3.03 TESTS

- A. Provide the service of a competent, factory-trained technician authorized by the manufacturer of the fire alarm equipment to technically supervise and participate during the programming, final connections, adjustments and tests for the system.
- B. When the system is complete and prior to the substantial completion, furnish testing equipment and perform the following tests:
- C. Before energizing system, check for correct wiring connections and test for short circuits, ground faults, continuity, and insulation.
- D. Test the insulation on installed wiring by standard methods as recommended by the equipment manufacturer.
- E. Open supervised circuits to see if the trouble signal activates.
- F. Ground supervised circuits and verify response of trouble signals.
- G. Check installation, supervision, operation, and sensitivity of smoke detectors as recommended by the manufacturer to ascertain that they will avoid false alarm signals yet provide the required automatic detection.
- H. Test each device for proper operation and auxiliary function.
- I. Submit a printout of the entire test procedure to the engineer with the letter of certification for the completed fire alarm system.
- J. When defects in the work are detected, make repairs and repeat the tests as required.
- K. Test system for NFPA standby and alarm runtime for the actual load on the system batteries and recharge time of system batteries.
- L. Perform required and necessary verification of the system operating functions with the Architect and Owner's facility staff prior to turnover of the complete system for final test observed by the Fire Department. Perform tests in the presence of the Owner or the Owner's Representative. A System Certification verifying the proper system operation is required prior to acceptance. Instruct Owner's personnel in system operation, maintenance and programming for a minimum of 20 hours. The cost of retesting as a result of the failure of the

system to operate in accordance with these specifications, drawings, or applicable codes paid for by the contractor to the Owner

3.04 EXTRA STOCK/SPARE PARTS

- A. Provide the following equipment to be turned over to the owner with the operation and maintenance manuals.
 - 1. Four photoelectric smoke detector heads
 - 2. Four thermal heat detector heads
 - 3. Four addressable dry contact modules
 - 4. Two horns
 - 5. Four horns/strobes
 - 6. Two manual pull stations
 - 7. One complete set of fuses to match panel counts

3.05 TRAINING

- A. Provide operation and maintenance training for Owner's personnel.
- B. Conduct a minimum of one maintenance training sessions upon completion of the work. Maintenance training sessions include a walk-thru of the completed facilities identifying the location, address, and means of access to every device monitored by the fire alarm system.
- C. Training sessions with fully qualified, trained representative, of the equipment manufacturer who is thoroughly knowledgeable of the specific installation.

END OF SECTION 28 30 00

SECTION 06 20 00 - FINISH CARPENTRY**PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Finish carpentry items.
- B. Wood cove & ceiling trim wire raceways.

1.02 RELATED REQUIREMENTS

- A. Section 28 05 13.
- B. Section 28 30 00

1.03 REFERENCE STANDARDS

- A. ANSI A208.1 - American National Standard for Particleboard; 2009.
- B. AWI (QCP) - Quality Certification Program; current edition at www.awiqcp.org.
- C. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.
- D. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards, U.S. Version 3.0; 2016.
- E. AWPA U1 - Use Category System: User Specification for Treated Wood; 2012.
- F. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood; 2009.
- G. WDMA I.S. 4 - Industry Specification for Preservative Treatment for Millwork; 2013.

1.04 SUBMITTALS

- A. See Division 1 Project Administration for submittal procedures and requirements. Refer to BID PACKAGE for these GENERAL REQUIREMENTS.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Protect work from moisture damage.

PART 2 PRODUCTS**2.01 FINISH CARPENTRY ITEMS**

- A. Quality Standard: Premium Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
- B. Interior Woodwork Items:
 - 1. Moldings: Ceiling Cove, Wire chase trim, pre-painted.

2.02 WOOD-BASED COMPONENTS

- A. Wood fabricated from old growth timber is not permitted.

2.03 LUMBER MATERIALS

- A. Softwood Lumber: face species, plain sawn, maximum moisture content of 6 percent; with vertical grain.
- B. Hardwood Lumber: face species, plain sawn, maximum moisture content of 6 percent .

2.04 FASTENINGS

- A. Adhesive for Purposes Other Than Laminate Installation: Suitable for the purpose; not containing formaldehyde or other volatile organic compounds.
- B. Brad Nails/Finish Screws, holes filled and paint touch up.

2.05 ACCESSORIES

- A. Lumber for Shimming and Blocking: Softwood lumber of Doug Fir species.
- B. Wood Filler: Solvent base, tinted to match surface finish color.

2.06 FABRICATION

- A. Shop assemble work for delivery to site, permitting passage through building openings.

- B. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify adequacy of backing and support framing.

3.02 INSTALLATION

- A. Install work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade indicated.
- B. Set and secure materials and components in place, plumb and level.
- C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim to conceal larger gaps.

3.03 TOLERANCES

- A. Maximum Variation from True Position: 1/16 inch.
- B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.

END OF SECTION

KING COUNTY HOUSING AUTHORITY

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

ADDRESS: 1408 NW RICHMOND BEACH RD, SHORELINE, WA 98177

MEADOWBROOK APARTMENTS



PROJECT DIRECTORY

OWNER
KING COUNTY HOUSING AUTHORITY
DARRELL WESTLAKE

600 ANDOVER PARK W
SEATTLE, WA 98134
TEL: 206-693-6415
EMAIL: DARRELLW@KCHA.ORG

ARCHITECT
OSBORN ARCHITECTS, INC
JERRY OSBORN, AIA

1011 SW KLUCKITAT WAY, SUITE 208
SEATTLE, WA 98134
TEL: 206-920-6348
EMAIL: JOSBORN@OAI.PS.COM

JURISDICTION
CITY OF SHORELINE

DRAWING LIST

T1.1	TITLE SHEET
T1.2	SITE PLAN
P1.1	PHOTO SHEET
P1.2	PHOTO SHEET
P1.3	PHOTO SHEET
FA1.1	BDG 1404 - LEVEL 1 FIRE ALARM DEVICE LAYOUT PLAN
FA1.2	BDG 1404 - LEVEL 2 FIRE ALARM DEVICE LAYOUT PLAN
FA1.3	BDG 1404 - LEVEL 3 FIRE ALARM DEVICE LAYOUT PLAN
FA2.1	BDG 1406 - LEVEL 1 FIRE ALARM DEVICE LAYOUT PLAN
FA2.2	BDG 1406 - LEVEL 2 FIRE ALARM DEVICE LAYOUT PLAN
FA2.3	BDG 1406 - LEVEL 3 FIRE ALARM DEVICE LAYOUT PLAN
FA3.1	BDG 1408 - LEVEL 1 FIRE ALARM DEVICE LAYOUT PLAN
FA3.2	BDG 1408 - LEVEL 2 FIRE ALARM DEVICE LAYOUT PLAN
FA3.3	BDG 1408 - LEVEL 3 FIRE ALARM DEVICE LAYOUT PLAN
FA4.1	BDG 1410 - LEVEL 1 FIRE ALARM DEVICE LAYOUT PLAN
FA4.2	BDG 1410 - LEVEL 2 FIRE ALARM DEVICE LAYOUT PLAN
FA4.3	BDG 1410 - LEVEL 3 FIRE ALARM DEVICE LAYOUT PLAN

REGULATED MATERIALS

H1. ALL EXISTING WALL AND CEILING TEXTURE CONTAINS ASBESTOS GREATER THAN 1%. MINIMIZE DISTURBANCE AND FOLLOW ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.

GENERAL NOTES

- DRAWINGS LISTED AS N.T.S. (INDICATES "NOT TO SCALE") SHOULD NOT BE SCALED. THE LISTED DIMENSIONS SHALL GOVERN UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL COORDINATE ALL PORTIONS OF WORK DESCRIBED IN THE CONTRACT DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY AND CONFIRM ALL DIMENSIONS AND CONDITIONS SHOWN OR IMPLIED ON THE DRAWINGS AND SPECIFICATIONS AS WELL AS THE EXISTING WORK AND PHYSICAL CONDITIONS OF THE SITE. IN THE EVENT OF DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS IN THE PACKAGE, PLEASE NOTIFY ARCHITECT IMMEDIATELY.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL REQUIRED SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES OR PROCEDURES REQUIRED TO PERFORM THE WORK.
- CONTRACTOR SHALL PROTECT ALL EXISTING ITEMS AND FACILITIES TO REMAIN THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL REPAIR AND/OR REPLACE AT CONTRACTORS EXPENSE ANY EXISTING ITEMS AND FACILITIES TO REMAIN THAT ARE DAMAGED BY CONTRACTORS OPERATIONS TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING APPROPRIATE JURISDICTIONS FOR REQUIRED INSPECTIONS AND SHALL PAY ALL FEES ASSOCIATED WITH THE WORK.
- THE CONTRACTOR SHALL CLEAN-UP DEBRIS AND HALL AWAY AND PROPERLY DISPOSE OF ALL DEBRIS ON A CONTINUOUS BASIS.
- EACH CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF DAMAGE TO THE WORK OF OTHER TRADES CAUSED BY HIS OPERATIONS. THE NATURE OF SUCH REPAIR WORK MUST RECEIVE THE PRIOR APPROVAL OF THE APPROPRIATE CONTRACTORS REPRESENTATIVE.
- UNLESS STATED OTHERWISE IN THE SPECIFICATIONS, ALL PROCEDURES, TESTING, MATERIALS AND EQUIPMENT SHOWN ON THE PLANS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
- UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A SET OF PRINTS OF THE FINAL CONSTRUCTION DOCUMENTS. ALL "AS-BUILT" MODIFICATIONS, INCLUDING MODIFICATIONS TO THE WORK OF ALL SUB-CONTRACTORS, SHOULD BE CLEARLY NOTED ON THESE PLANS.
- OVERLAPPING CONFLICTING REQUIREMENTS: MOST STRINGENT (GENERALLY MOST COSTLY) APPLIES AND WILL BE ENFORCED, UNLESS MORE DETAILS LANGUAGE WRITTEN DIRECTLY INTO CONTRACT DOCUMENTS CLEARLY INDICATED THAT A LESS STRINGENT REQUIREMENT IS ACCEPTABLE. REFER UNCERTAINTIES TO ARCHITECT FOR DECISION BEFORE PROCEEDING.
- WHERE OPTIONAL REQUIREMENTS ARE SPECIFIED IN A PARALLEL MANNER, OPTIONS ARE INTENDED TO BE CONTRACTORS UNLESS OTHERWISE NOTED.
- BUILDING TO REMAIN OCCUPIED DURING CONSTRUCTION. COORDINATE ACCESS AND STAGING W/ PROPERTY MANAGER. MAINTAIN FIRE SIGNAL COVERAGE FOR OCCUPIED AREAS THROUGHOUT PROJECT.

SCOPE OF WORK

- REPLACE ALL EXISTING FIRE ALARM DEVICES WITH NEW, EXCEPT AT ELEVATOR LOBBIES, ELEVATOR MACHINE ROOMS AND 1ST FLOOR ELECTRICAL ROOMS IN BUILDINGS 1404 AND 1408.
- FURNISH AND INSTALL NEW FIRE ALARM DEVICES.
- REPLACE FIRE ALARM PANELS AND ADD NAC POWER MODULES AS REQUIRED IN 1406 AND 1410.
- ADD NAC POWER MODULES AS REQUIRED IN BUILDINGS 1404 AND 1408.
- FIRE ALARM RISER DESIGNED BY FIRE ALARM VENDOR.
- PERMITTING AND JURISDICTION APPROVALS BY FIRE ALARM VENDOR.
- CONNECT NEW FACPS TO (E) TRANSPONDERS IN BUILDINGS 1406 AND 1410. COORDINATE W/ FIRE MONITORING COMPANY (FIRE SAFETY PROS)
- SUBMIT FIRE ALARM AS BUILTS AND PROJECT MANUAL AT PROJECT COMPLETION.
- WARRANT PARTS AND INSTALL FOR 1 YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
- FURNISH AND INSTALL FIRE ALARM SYSTEM "PICTOGRAM".

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES
 KING COUNTY HOUSING AUTHORITY
 1408 NW RICHMOND BEACH RD,
 SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

SHEET NO. / TITLE:

T1.1
TITLE SHEET

PROJECT NUMBER: KCH2301

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

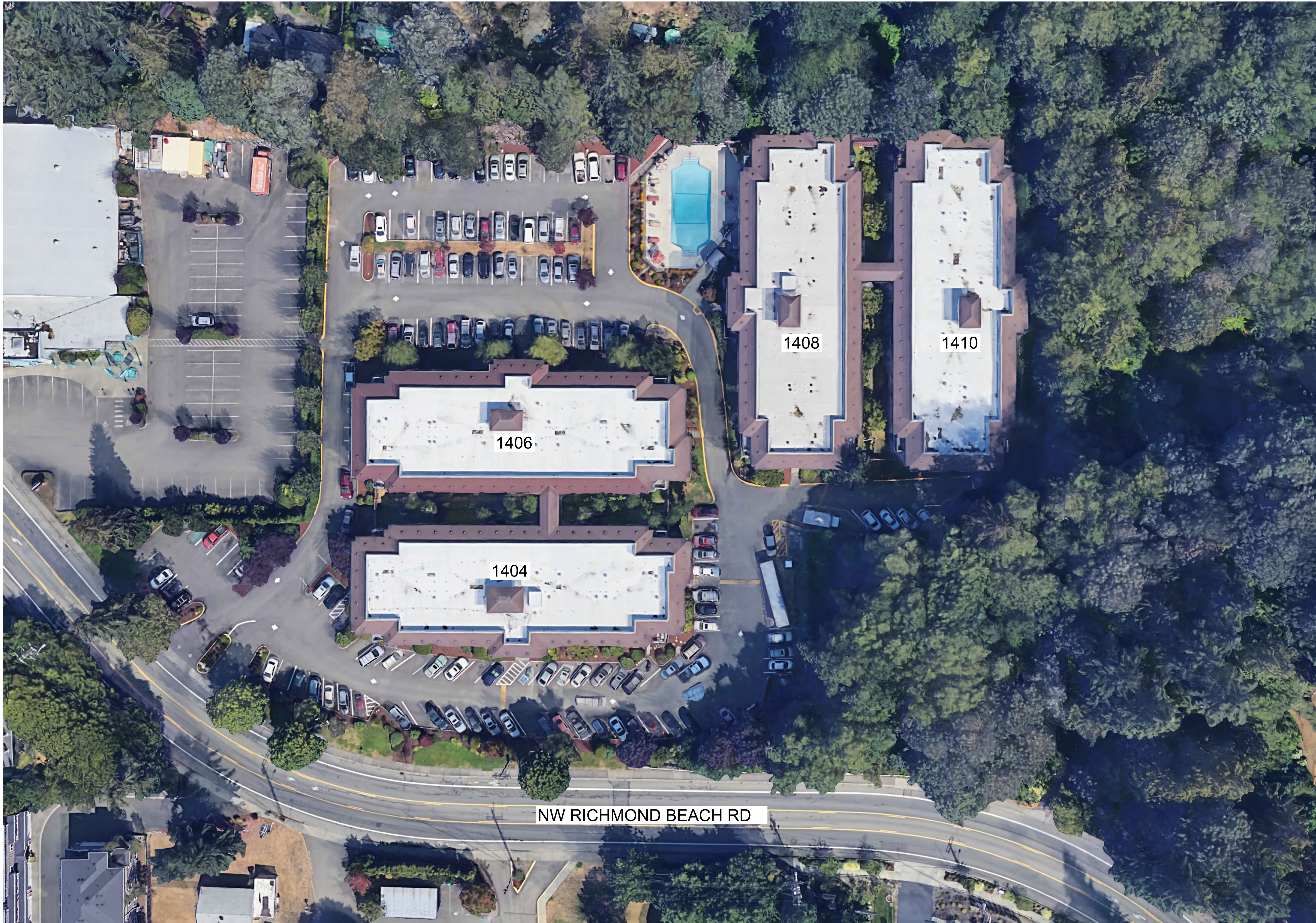
SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

SHEET NO. / TITLE:

**T1.2
SITE PLAN**

PROJECT NUMBER: KCH2301



1 MEADOWBROOK APARTMENTS SITE PLAN
SCALE: 1/32" = 1'-0"



NOTE: EXTERIOR HORN STROBE REQUIRED NEAR MAIN ENTRY OF EACH BUILDING.
COORDINATE LOCATION WITH FIRE MARSHALL.

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
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DRAWN BY: **MD** REVIEWED BY: **JDO**

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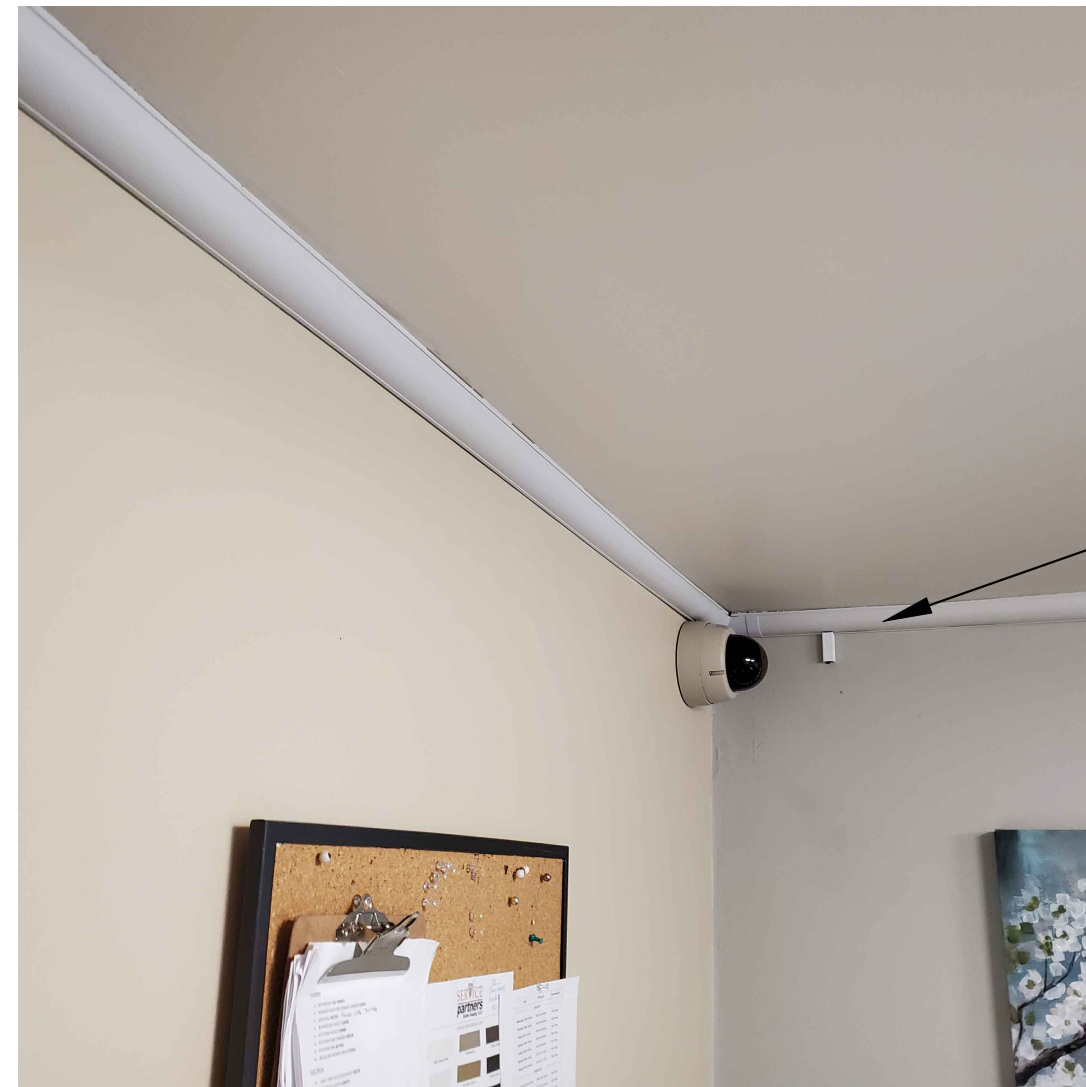
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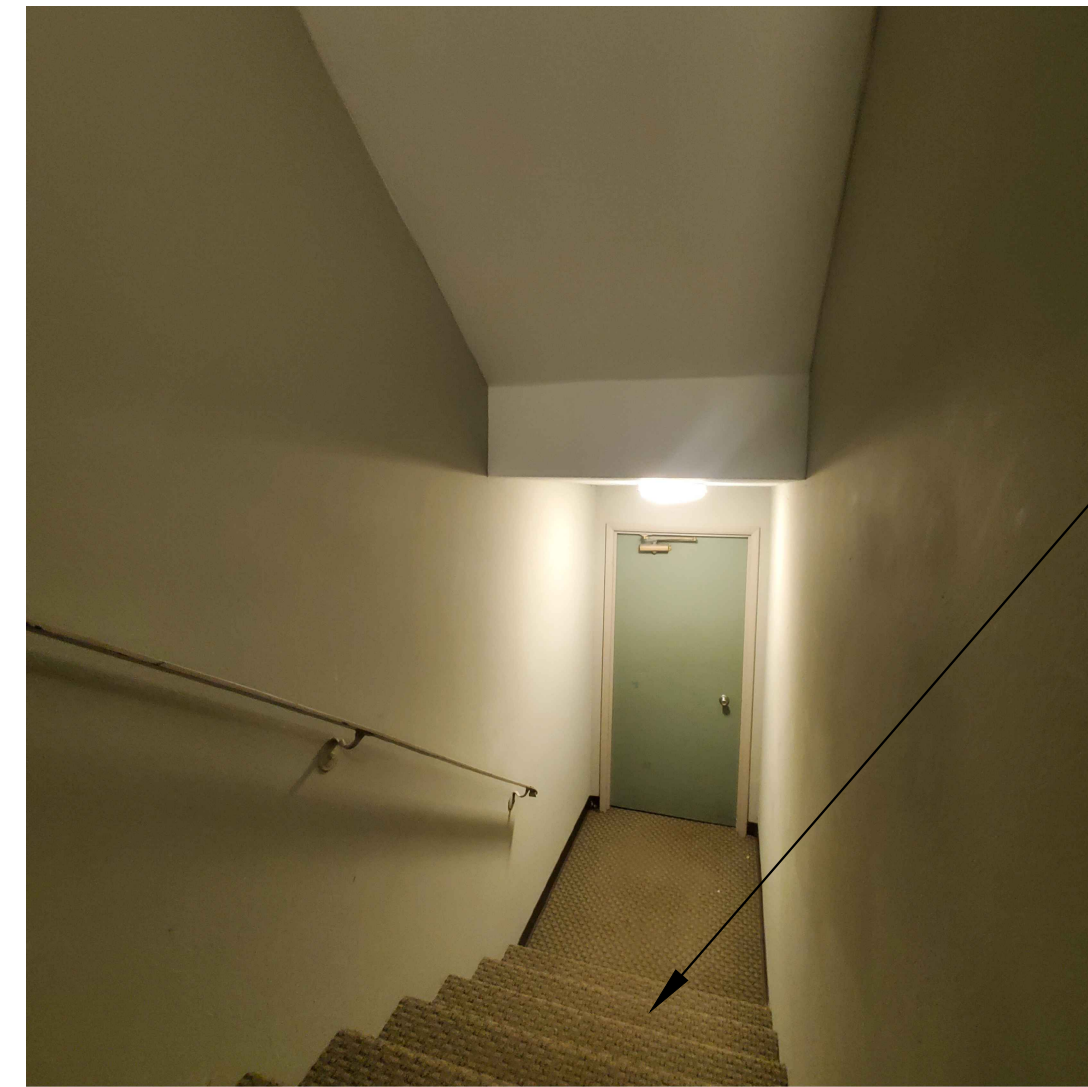
P1.1
PHOTO DETAIL
SHEET

PROJECT NUMBER: KCH2301



NOTE:
PRE-FINISHED, LOW PROFILE, UL LISTED COVER, SIMILAR TO THAT INSTALLED IN LEASING OFFICE, TO BE USED TO CONCEAL FIRE ALARM WIRING AT ALL EXPOSED LOCATIONS

9 BDG 1408 - LEASING OFFICE
NTS



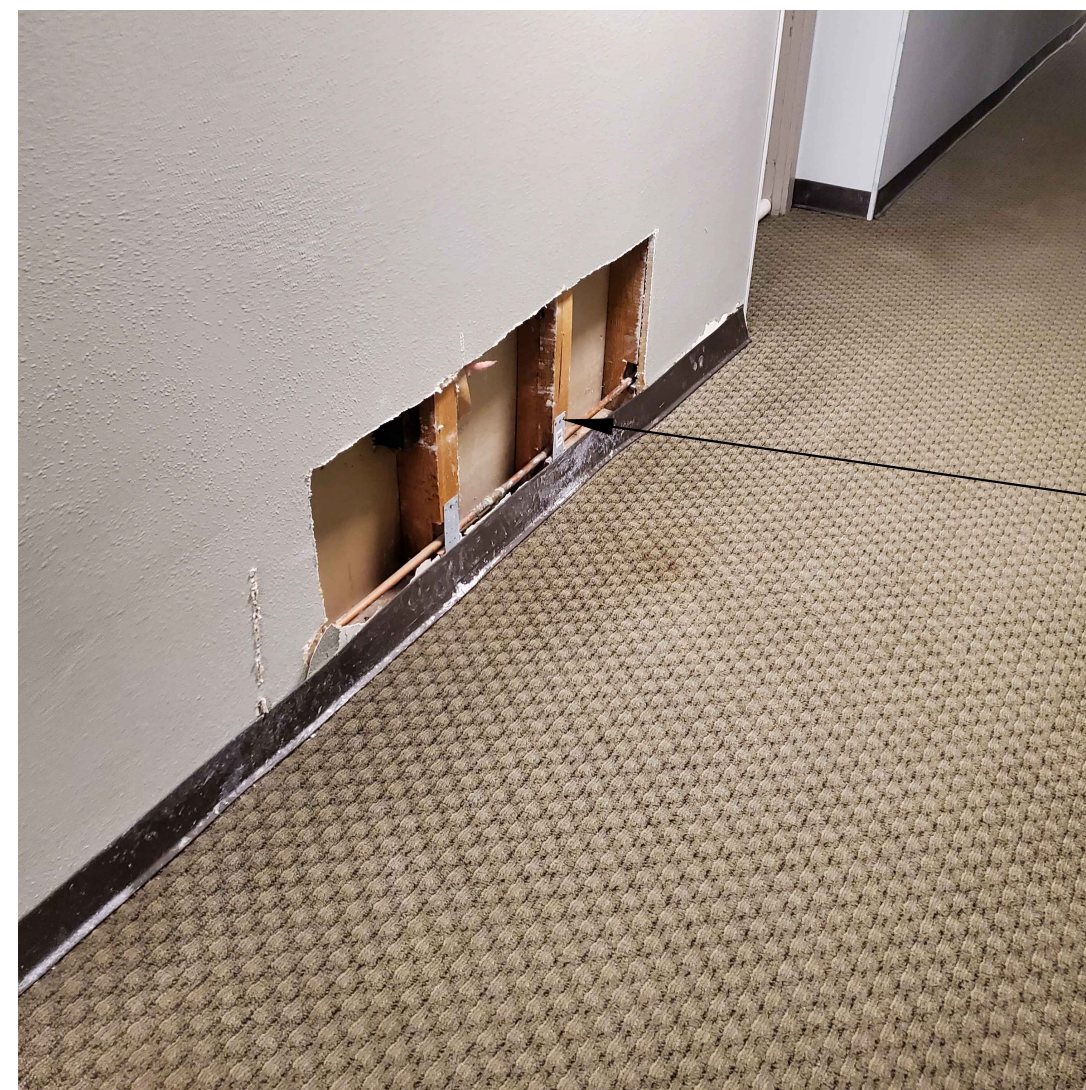
TYPICAL STAIRS CONFIGURATION AND FINISHES

6 STAIRS
NTS



RETAIN (E) FACP. RE-PROGRAM AS REQUIRED FOR NEW DEVICES. FIRE ALARM DEVICES INSTALLED IN ELECTRICAL ROOMS SERVING 1404 AND 1408 MAY BE REUSED. RE-PROGRAM AS REQUIRED.

3 BDG 1408 - ELEC. ROOM (BDG 1404 SIM.)
NTS



TYP. WOOD CONSTRUCTION 2x4 WOOD STUD PARTITIONS W/ GWB ON EACH SIDE.
NOTE:
THERE IS ASBESTOS PRESENT IN GWB TEXTURE AND JOINT COMPOUND

8 WALL CONSTRUCTION
NTS



FIRE ALARM DEVICES IN THE ELEVATOR LOBBIES IN 1404 AND 1408 WERE UPGRADED IN 2022. THESE DEVICES MAY REMAIN. RE-PROGRAM AS REQUIRED.

5 BDG 1408 3RD FLOOR - ELEVATOR LOBBY
NTS



RE PHOTO 3

2 BDG 1408 - FACP (BDG 1404 SIM.)
NTS



TYP. CORRIDOR LAYOUT. SEE PHOTO 9/P1.1 FOR CONCEALING NEW FIRE ALARM WIRING.

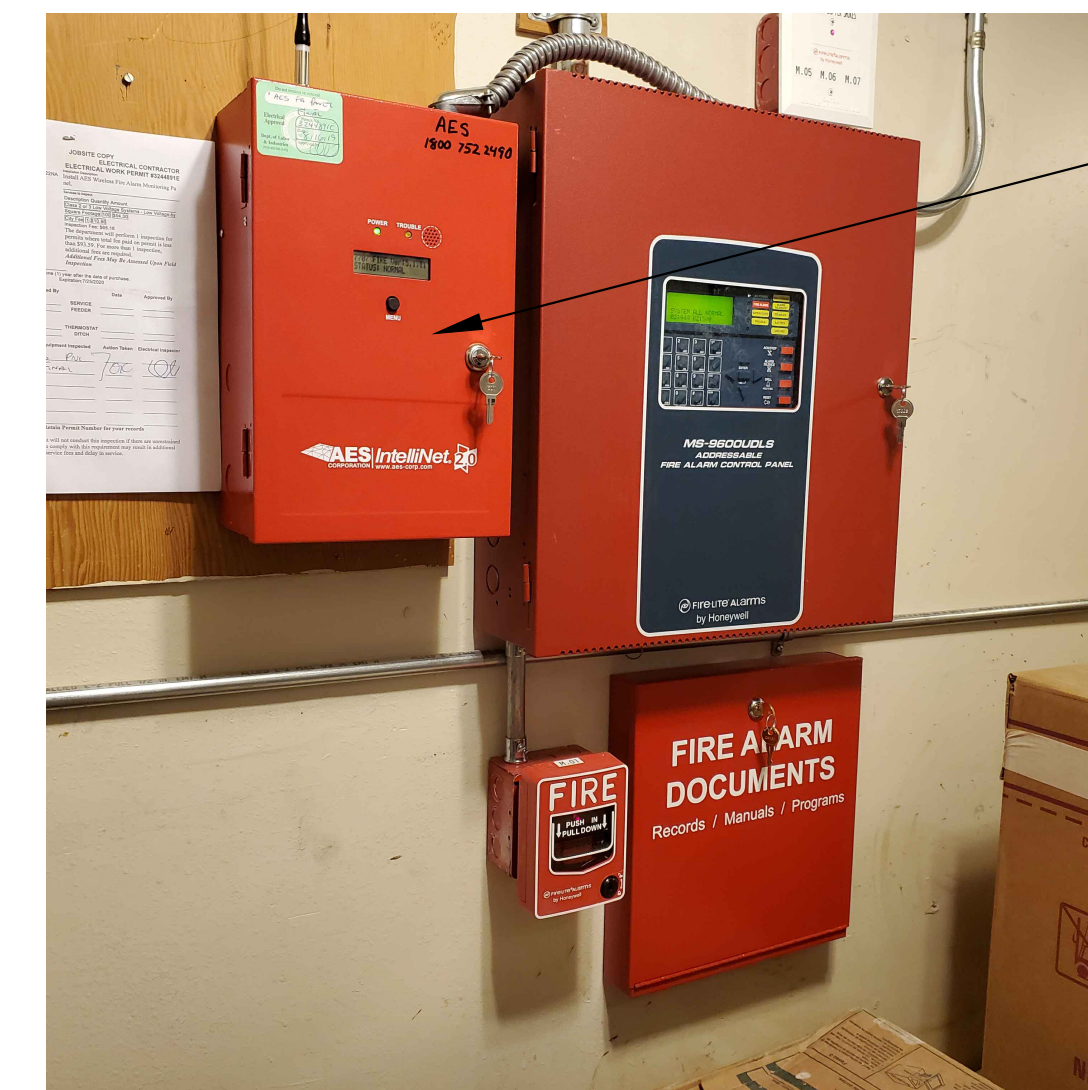
7 TYP CORRIDOR
NTS



RE PHOTO 9/P1.1

RE PHOTO 5/P1.1

4 BDG 1408 1ST FLOOR - ELEVATOR LOBBY
NTS



RETAIN (E) MONITORING TRANSMITTER. COORDINATE WITH MONITORING AGENCY REFERENCED ON SHEET T1.1

1 BDG 1408 - FACP (BDG 1404 SIM.)
NTS

GENERAL NOTES: PHOTOS INCLUDED TO PROVIDE INFORMATION ON SPECIFIC PROJECT REQUIREMENTS AS WELL AS INFORMATION ON INTERIOR FINISHES AND ACCESS REQUIREMENTS.

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

SHEET NO. / TITLE:

P1.2
PHOTO DETAIL
SHEET

PROJECT NUMBER: KCH2301



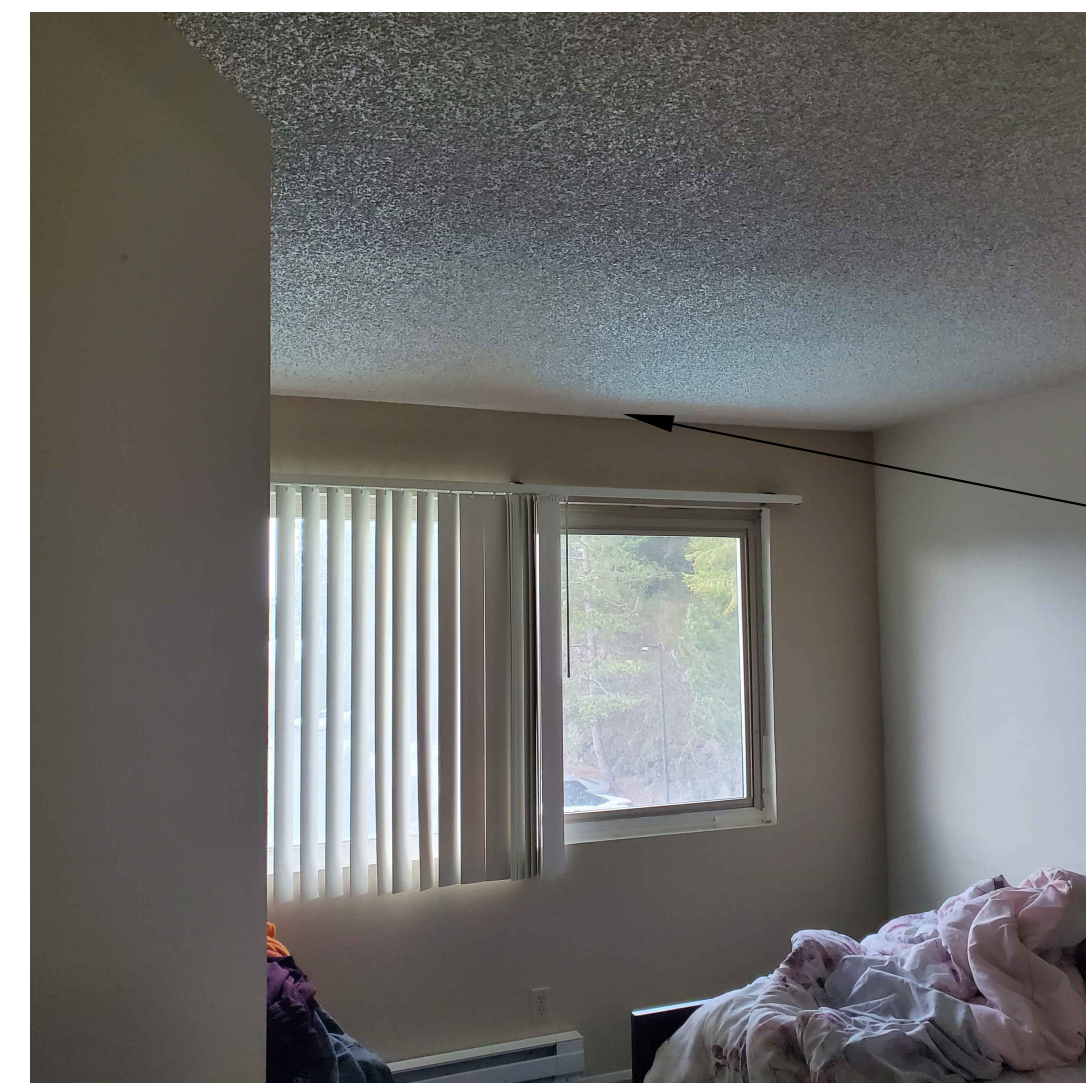
9 BDG 1404 - FA PANEL
NTS

RETAIN (E) FACP.
RE-PROGRAM AS REQUIRED FOR
NEW DEVICES.
FIRE ALARM DEVICES INSTALLED IN
ELECTRICAL ROOMS SERVING 1404
AND 1408 MAY BE REUSED.
RE-PROGRAM AS REQUIRED.



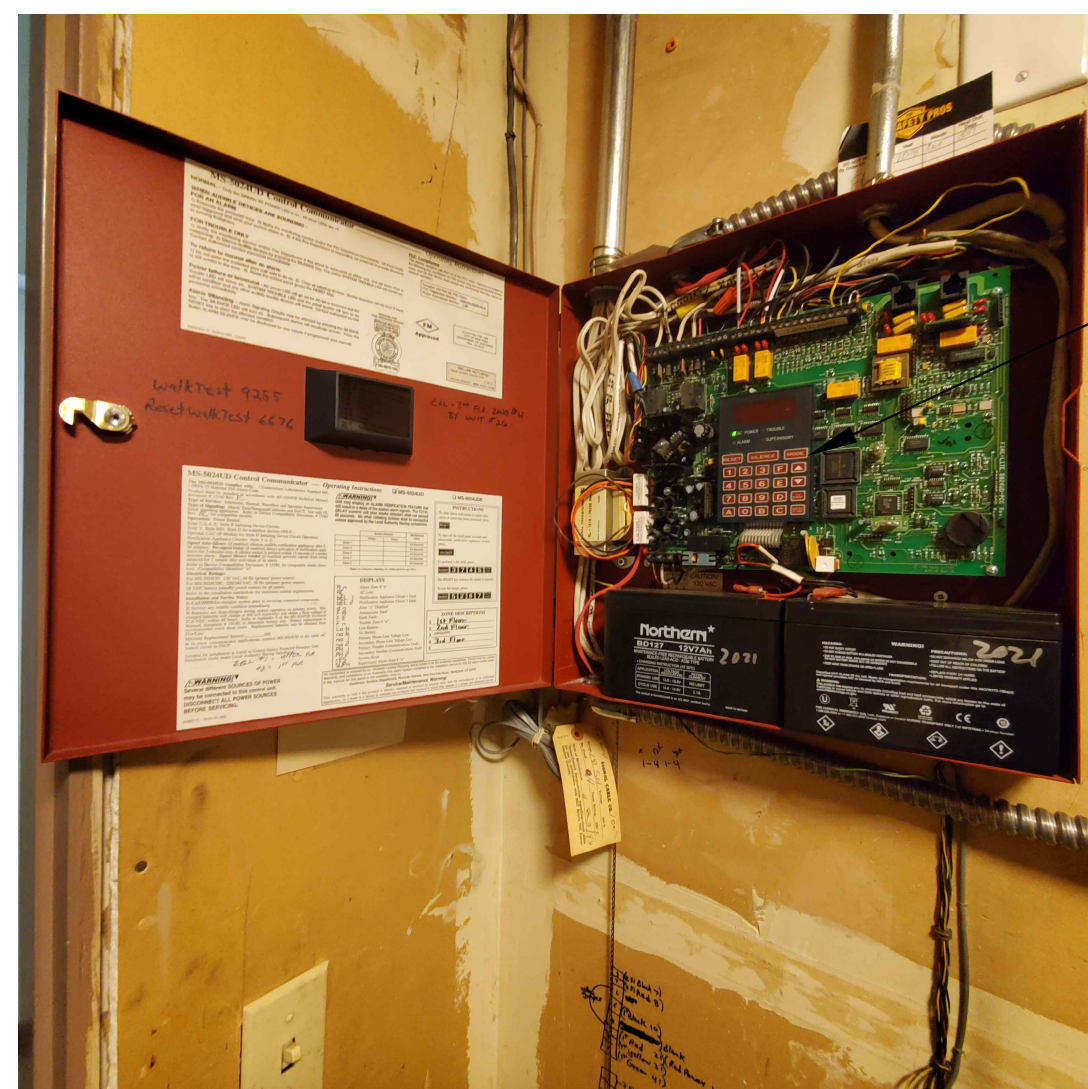
6 TYP. UNIT
NTS

NOTE:
PRE-FINISHED, LOW PROFILE, UL
LISTED COVER, SIMILAR TO THAT
INSTALLED IN LEASING OFFICE, TO
BE USED TO CONCEAL FIRE ALARM
WIRING AT ALL EXPOSED
LOCATIONS



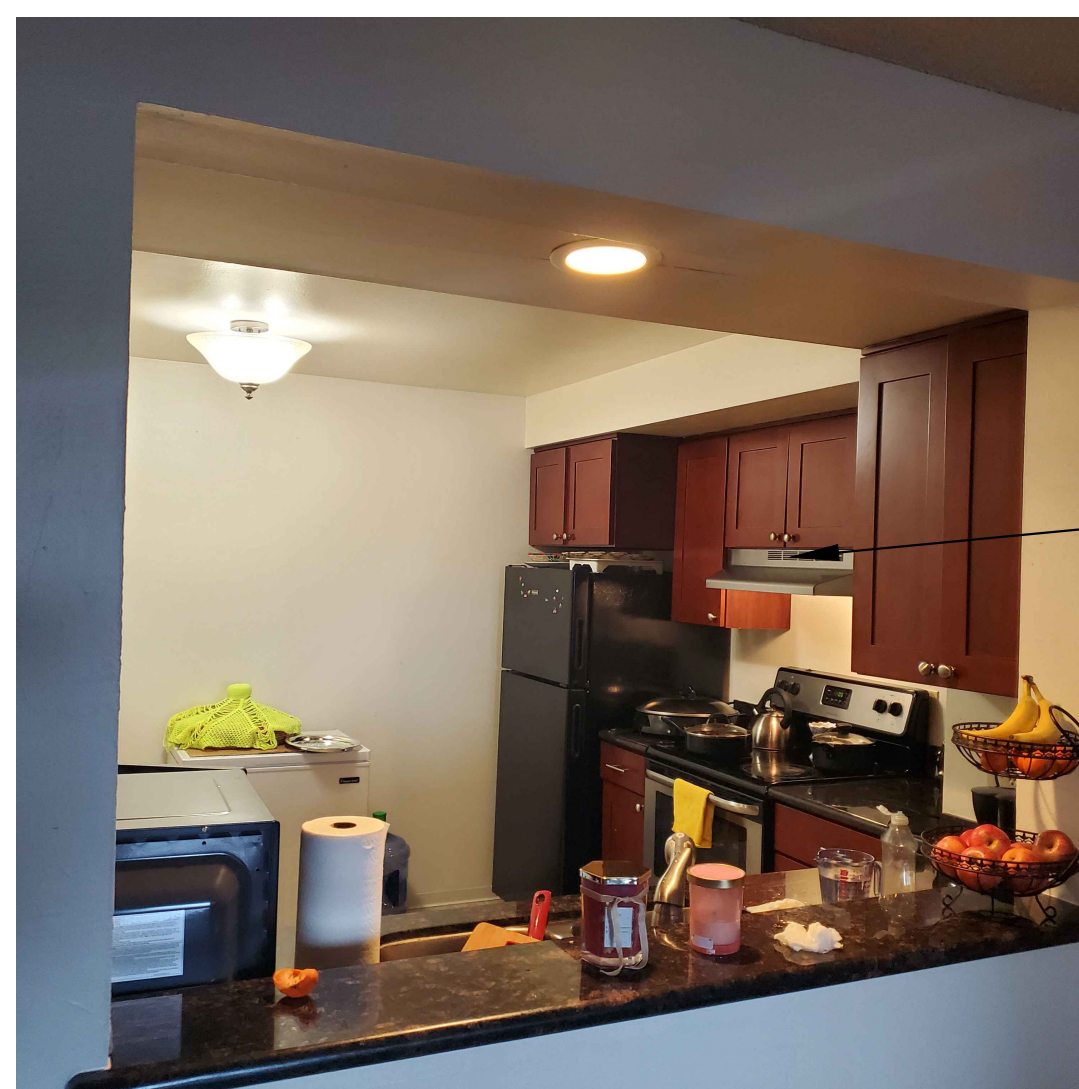
3 TYP. UNIT
NTS

NOTE:
PRE-FINISHED, LOW
PROFILE, UL LISTED
COVER, SIMILAR TO THAT
INSTALLED IN LEASING
OFFICE, TO BE USED TO
CONCEAL FIRE ALARM
WIRING AT ALL EXPOSED
LOCATIONS



8 BDG 1404 - FA PANEL
NTS

RETAIN (E) FACP.
RE-PROGRAM AS REQUIRED FOR
NEW DEVICES.
FIRE ALARM DEVICES INSTALLED IN
ELECTRICAL ROOMS SERVING 1404
AND 1408 MAY BE REUSED.
RE-PROGRAM AS REQUIRED.



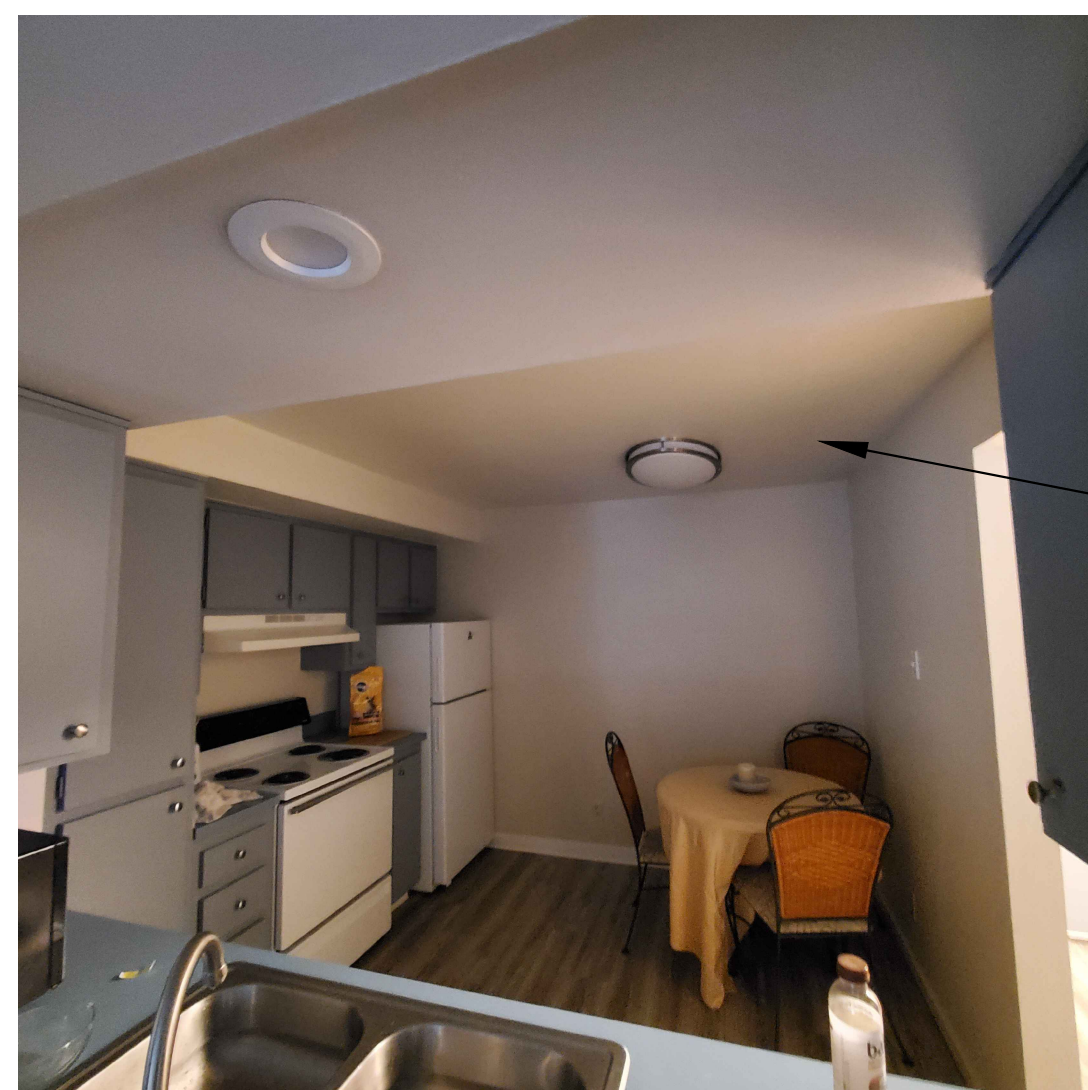
5 TYP. UNIT
NTS

NOTE:
PRE-FINISHED, LOW PROFILE, UL
LISTED COVER, SIMILAR TO THAT
INSTALLED IN LEASING OFFICE, TO
BE USED TO CONCEAL FIRE ALARM
WIRING AT ALL EXPOSED
LOCATIONS



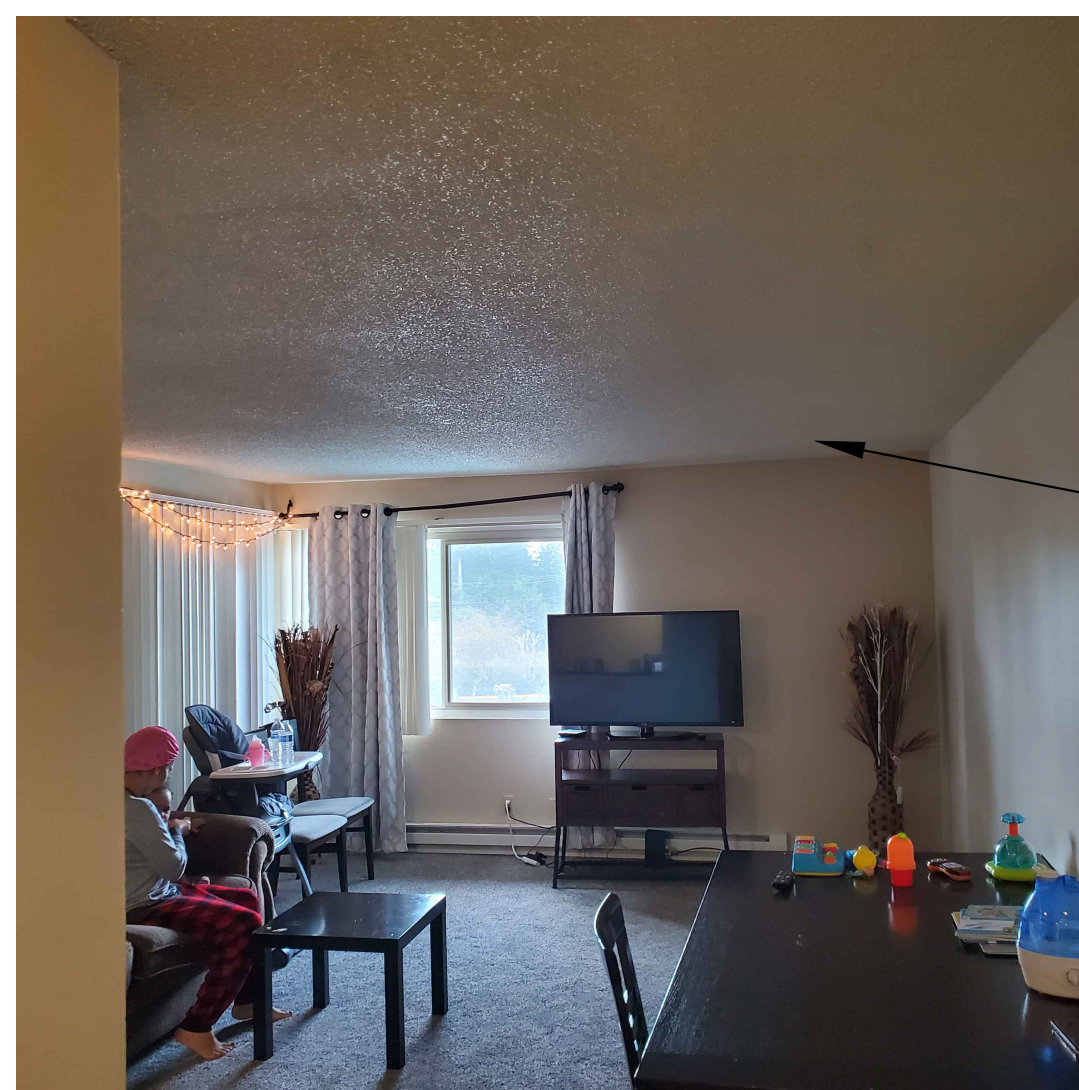
2 BDG 1410 - MAINTENANCE SHOP
NTS

NOTE:
PRE-FINISHED, LOW
PROFILE, UL LISTED
COVER, SIMILAR TO THAT
INSTALLED IN LEASING
OFFICE, TO BE USED TO
CONCEAL FIRE ALARM
WIRING AT ALL EXPOSED
LOCATIONS



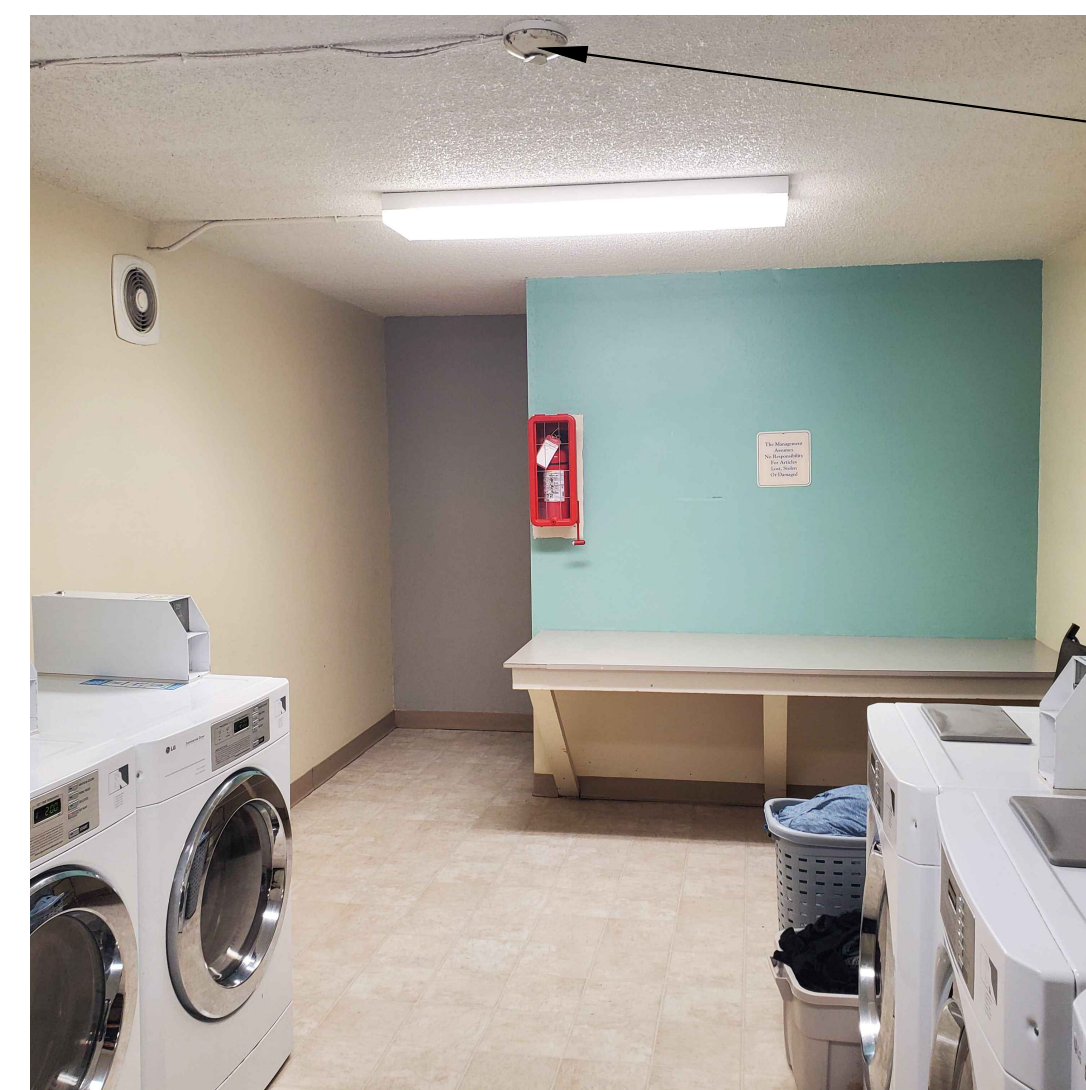
7 TYP. KITCHEN UNIT
NTS

NOTE:
PRE-FINISHED, LOW PROFILE, UL
LISTED COVER, SIMILAR TO THAT
INSTALLED IN LEASING OFFICE, TO
BE USED TO CONCEAL FIRE ALARM
WIRING AT ALL EXPOSED
LOCATIONS



4 TYP. UNIT
NTS

NOTE:
PRE-FINISHED, LOW PROFILE, UL
LISTED COVER, SIMILAR TO THAT
INSTALLED IN LEASING OFFICE, TO
BE USED TO CONCEAL FIRE ALARM
WIRING AT ALL EXPOSED
LOCATIONS



1 TYP. LAUNDRY ROOM
NTS

REPLACE ALL (E) FIRE
ALARM DEVICES
EXCEPT AT ELEVATOR
LOBBIES, ELEVATOR
MACHINE ROOMS & 1ST
FLOOR ELECTRICAL
ROOMS IN BUILDINGS
1404 & 1408

GENERAL NOTES: PHOTOS INCLUDED TO PROVIDE INFORMATION ON SPECIFIC PROJECT REQUIREMENTS AS WELL AS INFORMATION ON INTERIOR FINISHES AND ACCESS REQUIREMENTS.

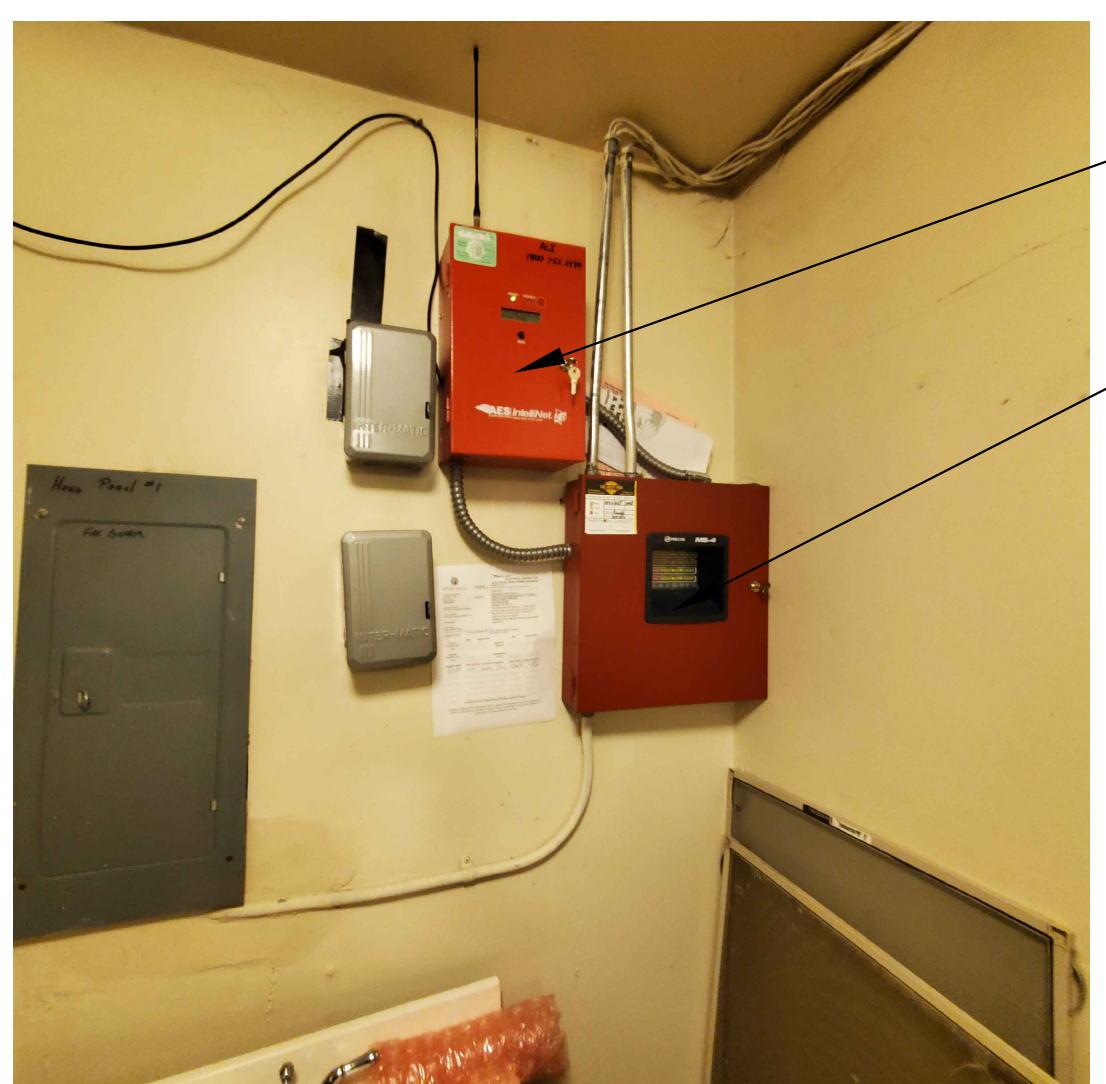
MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES
 KING COUNTY HOUSING AUTHORITY
 1408 NW RICHMOND BEACH RD,
 SHORELINE, WA 98177

DRAWN BY: MD	REVIEWED BY: JDO
PROJECT STATUS:	
ISSUE DATE:	
SHEET SIZE: ARCH D (24" x 36")	
DRAWING SCALE:	
SHEET NO. / TITLE: P1.3 PHOTO DETAIL SHEET	
PROJECT NUMBER: KCH2301	



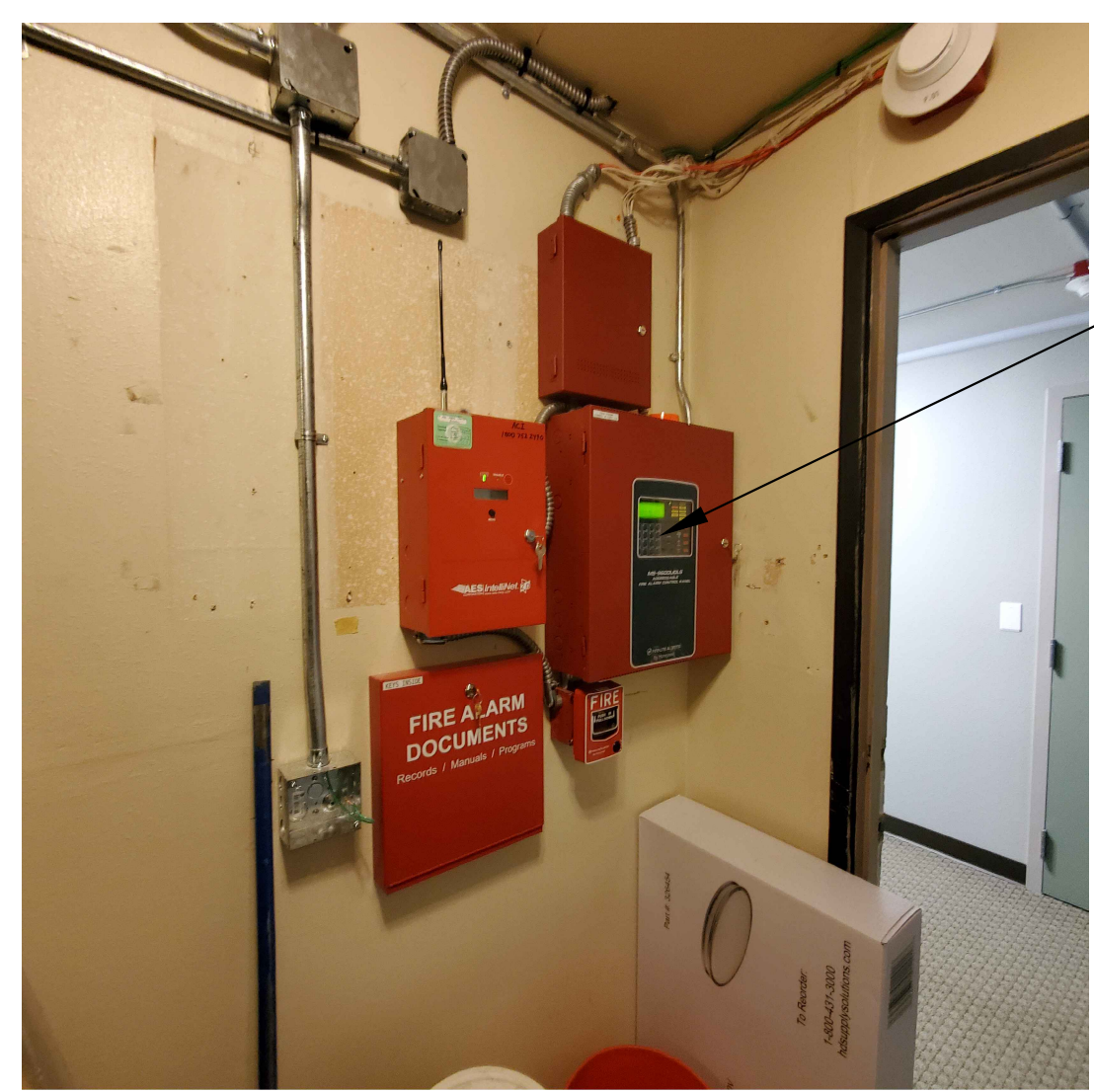
6 ANNUNCIATOR
NTS

(E) FIRE ANNUNCIATOR PANEL. OKAY TO RE-USE CONDUIT. REPLACE W/ NEW, TYPICAL FOR ALL BUILDINGS



3 BDG 1406 - FA PANEL (BDG 1410 SIM.)
NTS

CONNECT (E) TRANSMITTER TO NEW FACP (TYP. 1406 & 1410)
REPLACE FACP: TYPICAL 1406 AND 1410



5 BDG 1404 - FA PANEL
NTS

RETAIN (E) FACP. RE-PROGRAM AS REQUIRED FOR NEW DEVICES. FIRE ALARM DEVICES INSTALLED IN ELECTRICAL ROOMS SERVING 1404 AND 1408 MAY BE REUSED. RE-PROGRAM AS REQUIRED.



2 BDG 1406 - FA PANEL (BDG 1410 SIM.)
NTS

REPLACE FACP: TYPICAL 1406 AND 1410

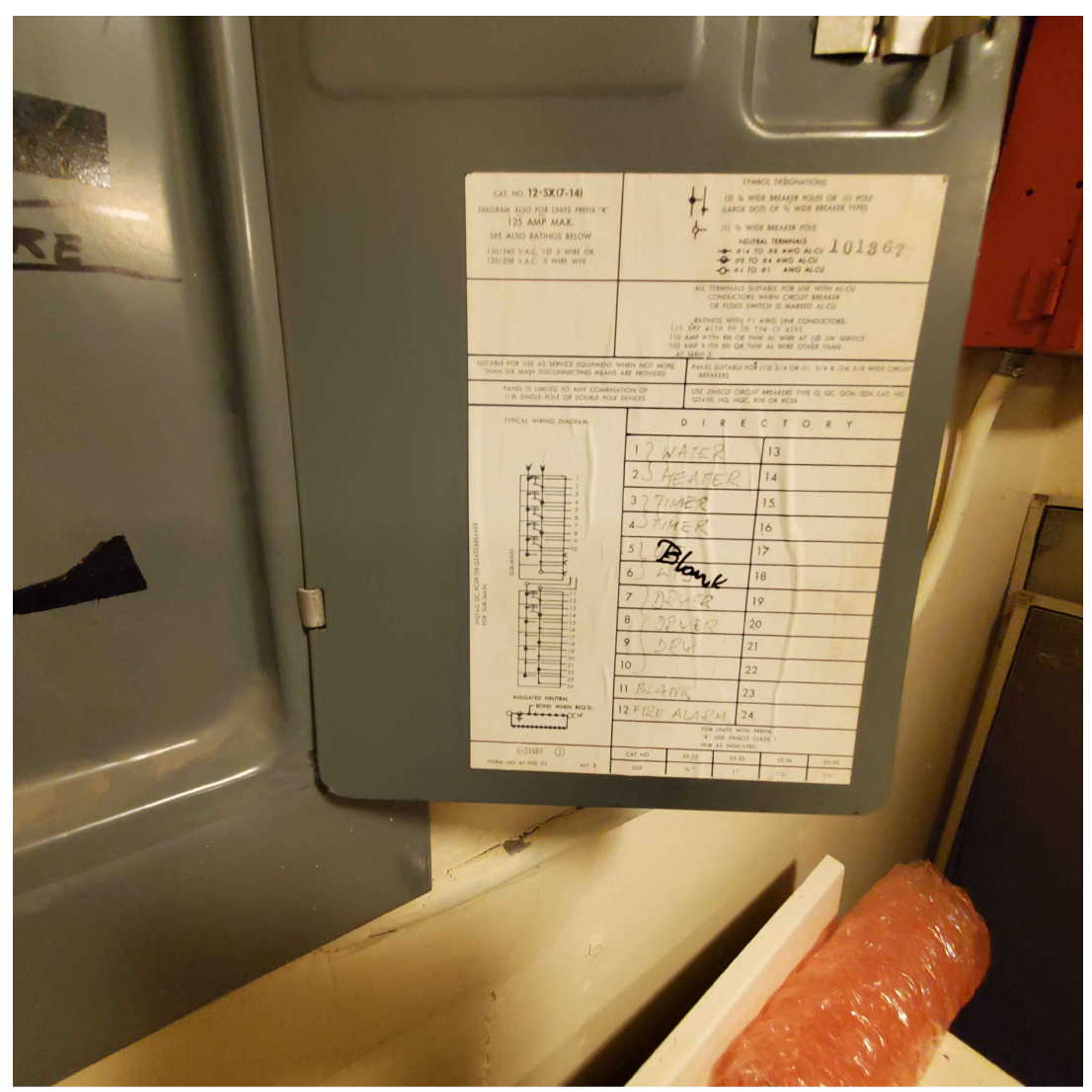


7 1408 FRONT ENTRY
NTS

TYP. EXTERIOR FACADE. COORDINATE LOCATION OF EXTERIOR HORN STROBE. NO EXPOSED CONDUIT OR RACEWAY ALLOWED ON BUILDING EXTERIOR

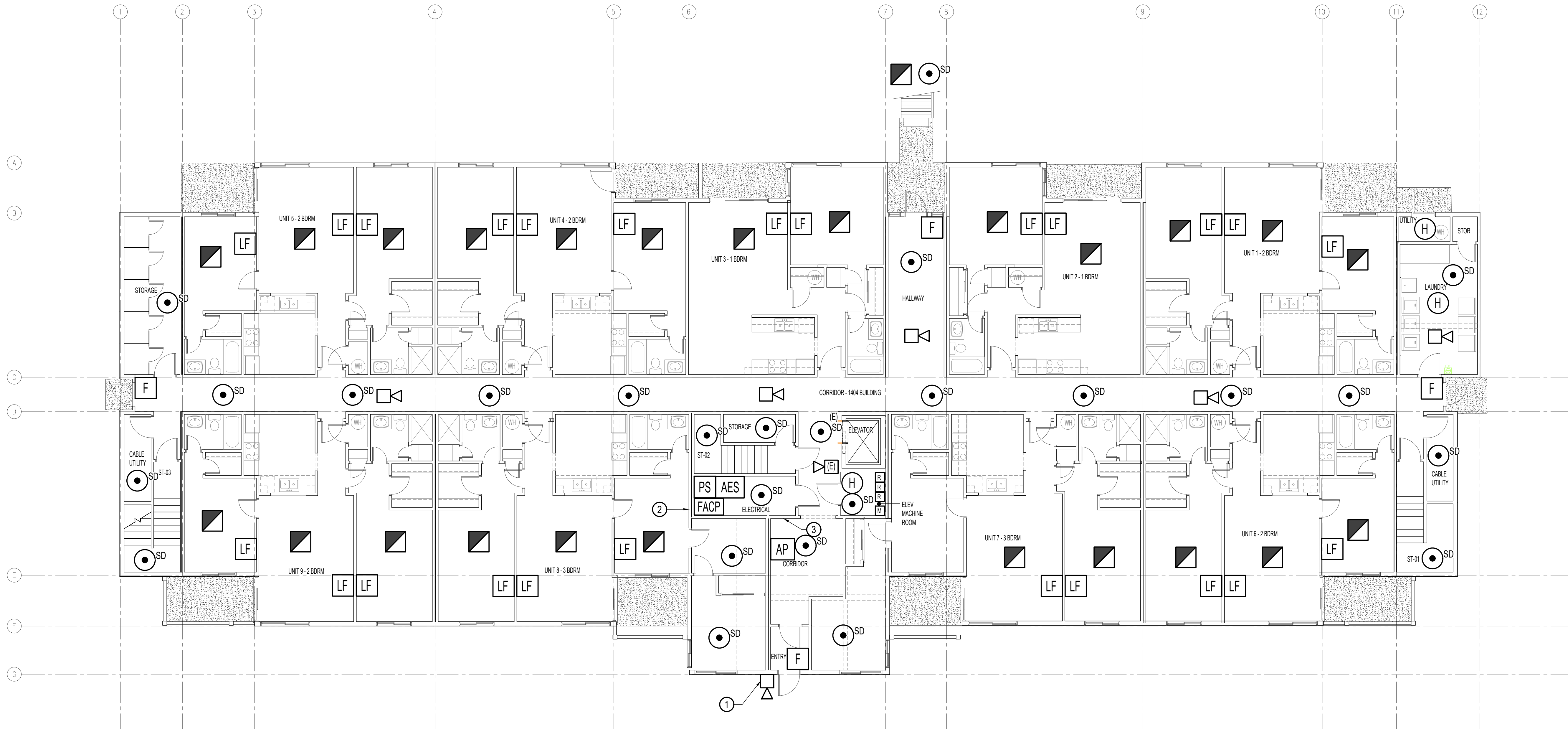


4 BDG 1406 - FA ELEC.
NTS

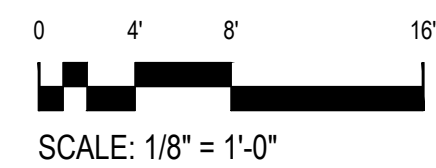


1 BDG 1406 - ELEC PANEL
NTS





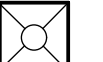


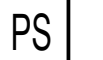





GENERAL NOTES: PHOTOS INCLUDED TO PROVIDE INFORMATION ON SPECIFIC PROJECT REQUIREMENTS AS WELL AS INFORMATION ON INTERIOR FINISHES AND ACCESS REQUIREMENTS.



1 BDG 1404 - LEVEL 1 - F.A. DEVICE LAYOUT PLAN
SCALE: 1/8" = 1'-0"



LEGEND:

-  WALL OR CEILING MOUNT HORN /STROBE
-  LOW FREQUENCY SOUNDER
-  SMOKE ALARM (BATTERY POWERED)
-  PULL STATION
-  WALL OR CEILING STROBE
-  REINY
-  MONITOR/TNAC MODULE
-  NAC/POWER SUPPLY
-  HEAT
-  ANNUNCIATOR
-  RADIO
-  MAIN PANEL
-  SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

KEY NOTES:

- ① EXTERIOR HORN STROBE. COORDINATE LOCATION W/ LOCAL FIRE MARSHAL.
- ② THE (E) FACP WAS REPLACED IN 2022 WITH ELEVATOR MODERNIZATION. FIRE ALARM DEVICES IN CORRIDOR SERVING 1ST FLOOR ELEVATOR, ELEC. ROOM AND ELEVATOR MACHINE ROOM WERE REPLACED AND APPEAR TO BE ADDRESSIBLE.
- ③ (E) ANNUNCIATOR LOCATION - RE 6/P1.3.
REPLACE WITH NEW TYPICAL AT ALL BUILDINGS.

BUILDING 1404 GENERAL NOTES:

1. (E) PLAN IS DIAGRAMMATIC TO SHOW NEW FIRE ALARM DEVICE REQUIREMENTS.
2. RE-USE (E) FACP. ADD NAC POWER MODULES AS REQUIRED.
3. FIRE ALARM RISER DESIGNED BY FIRE ALARM VENDOR.
4. REPLACE ALL (E) FIRE ALARM DEVICES AND ADD NEW AS REQUIRED TO MEET JURISDICTIONAL REQUIREMENTS. RETAIN (E) DEVICES IN ELEVATOR LOBBIES, ELEVATOR MACHINE ROOMS AND 1ST FLOOR ELECTRICAL ROOM.
5. MINIMIZE DISTURBANCE OF (E) ACM CEILING AND WALL FINISHES.
FOLLOW ALL LOCAL, STATE AND FEDERAL REQUIREMENTS ASSOCIATED W/ ACM DISTURBANCE.
6. VERIFY LOCATION OF EXTERIOR HORN STROBE W/ FIRE MARSHALL.
7. ADA UNITS WILL HAVE EXTRA VISUAL AND AUDIBLE DEVICES (FOR BIDDING PURPOSES ASSUME NO ADA UNITS).
8. ANY HVAC AND OTHER AUXILIARY FIELD EQUIPMENT WILL BE TIED IN PER NFPA AND LOCAL AHJ.
9. UNITS IN 1404 AND 1408 ARE SIMILAR. BOTH HAVE ADDRESSIBLE FACP'S AND BOTH ARE 3-STORY.
10. RUN ALL FIRE ALARM WIRING IN PRE-FINISHED, UL LISTED RACEWAYS AT FINISHED AREAS.

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

SHEET NO. / TITLE:

FA1.1
BDG 1404 - LEVEL 1
FIRE ALARM DEVICE
LAYOUT PLAN

PROJECT NUMBER: KCH2301

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
 1408 NW RICHMOND BEACH RD,
 SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

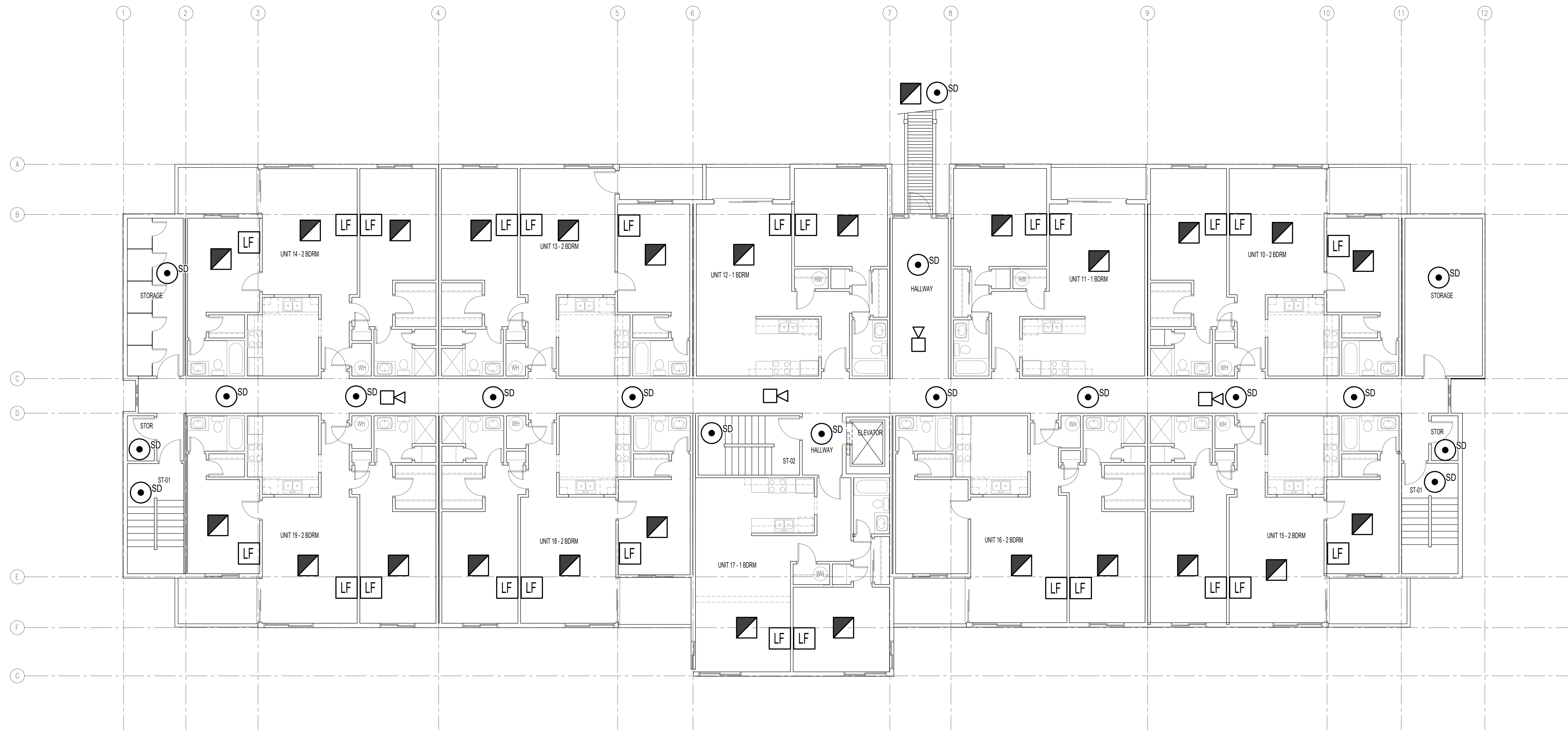
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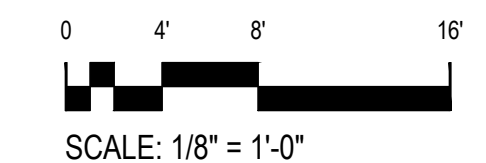
SHEET NO. / TITLE:

FA1.2
BDG 1404 - LEVEL 2
FIRE ALARM DEVICE
LAYOUT PLAN





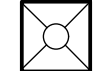








PROJECT NUMBER: KCH2301



1 **BDG 1404 - LEVEL 2 - F.A. DEVICE LAYOUT PLAN**
 SCALE: 1/8" = 1'-0"



LEGEND:

-  WALL OR CEILING MOUNT HORN /STROBE
-  LOW FREQUENCY SOUNDER
-  SMOKE ALARM (BATTERY POWERED)
-  PULL STATION
-  WALL OR CEILING STROBE
-  REIN
-  MONITOR/TNAC MODULE
-  NAC/POWER SUPPLY
-  HEAT
-  ANNUNCIATOR
-  RADIO
-  MAIN PANEL
-  SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

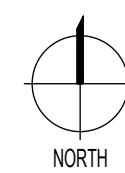
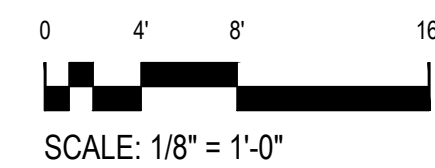
SHEET NO. / TITLE:

FA1.3
BDG 1404 - LEVEL 3
FIRE ALARM DEVICE
LAYOUT PLAN







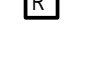






PROJECT NUMBER: KCH2301



1 **BDG 1404 - LEVEL 3 - F.A. DEVICE LAYOUT PLAN**
SCALE: 1/8" = 1'-0"

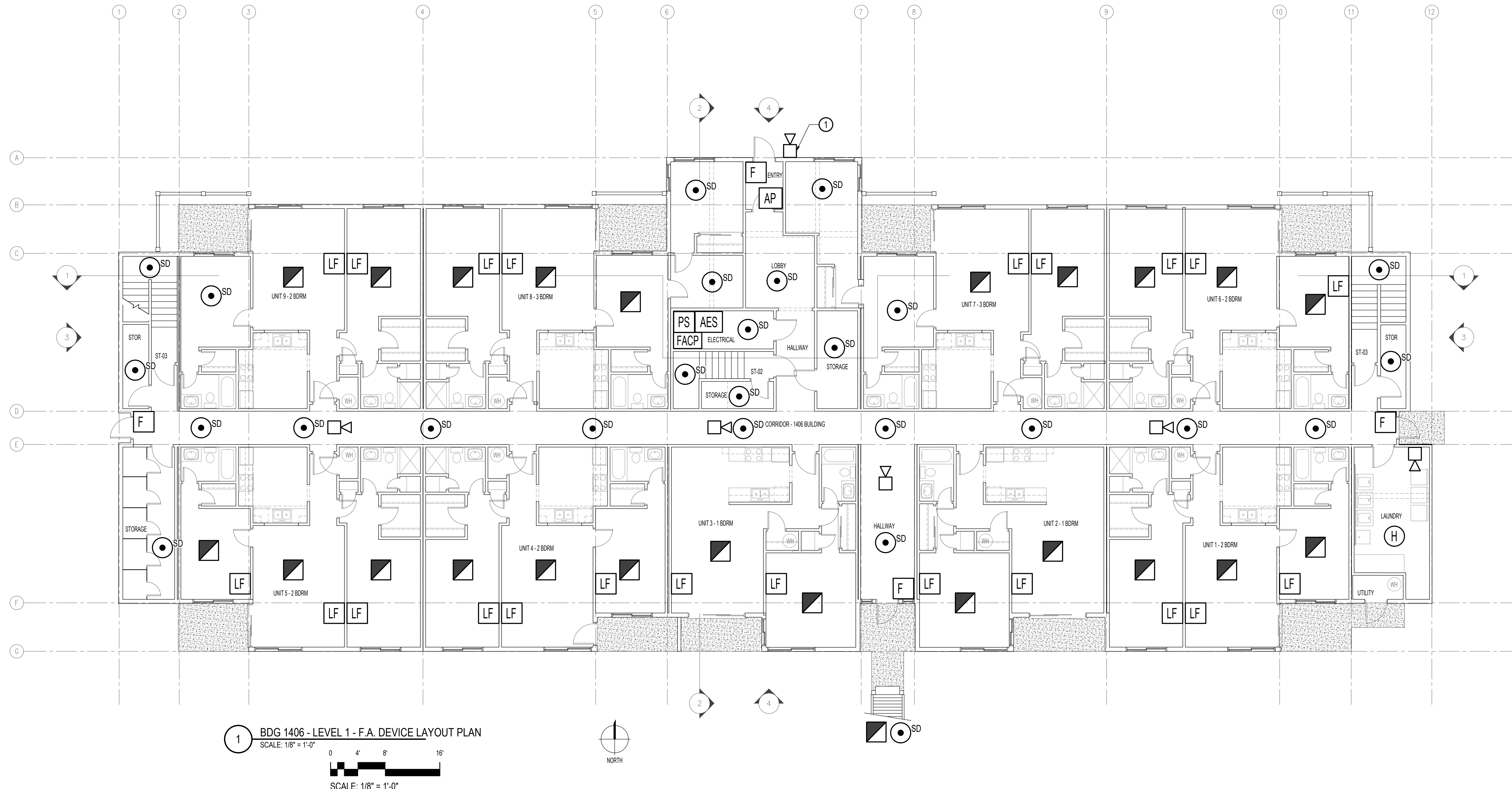


LEGEND:

-  WALL OR CEILING MOUNT HORN /STROBE
-  LOW FREQUENCY SOUNDER
-  SMOKE ALARM (BATTERY POWERED)
-  PULL STATION
-  WALL OR CEILING STROBE
-  REINY
-  MONITOR/TNAC MODULE
-  NAC/POWER SUPPLY
-  HEAT
-  ANNUNCIATOR
-  RADIO
-  MAIN PANEL
-  SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
 1408 NW RICHMOND BEACH RD,
 SHORELINE, WA 98177



1 BDG 1406 - LEVEL 1 - F.A. DEVICE LAYOUT PLAN
 SCALE: 1/8" = 1'-0"

KEY NOTES:

- 1 EXTERIOR HORN STROBE. COORDINATE LOCATION W/ LOCAL FIRE MARSHAL.

LEGEND:

- 1 WALL OR CEILING MOUNT HORN /STROBE
- LOW FREQUENCY SOUNDER
- SMOKE ALARM (BATTERY POWERED)
- PULL STATION
- WALL OR CEILING STROBE
- REINY
- MONITOR/TNAC MODULE
- NAC/POWER SUPPLY
- HEAT
- ANNUNCIATOR
- RADIO
- MAIN PANEL
- SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

BUILDING 1406 GENERAL NOTES:

- (E) PLAN IS DIAGRAMMATIC TO SHOW NEW FIRE ALARM DEVICE REQUIREMENTS.
- REPLACE FIRE ALARM PANEL AND REPLACE NAC POWER SUPPLIES AS REQUIRED.
- FIRE ALARM RISER DESIGNED BY FIRE ALARM VENDOR.
- REPLACE ALL (E) FIRE ALARM DEVICES AND ADD NEW AS REQUIRED TO MEET JURISDICTIONAL REQUIREMENTS
- MINIMIZE DISTURBANCE OF (E) ACM CEILING AND WALL FINISHES.
 FOLLOW ALL LOCAL, STATE AND FEDERAL REQUIREMENTS ASSOCIATED W/ ACM DISTURBANCE.
- VERIFY LOCATION OF EXTERIOR HORN STROBE W/ FIRE MARSHAL.
- ADA UNITS WILL HAVE EXTRA VISUAL AND AUDIBLE DEVICES (FOR BIDDING PURPOSES ASSUME NO ADA UNITS).
- ANY HVAC AND OTHER AUXILIARY FIELD EQUIPMENT WILL BE TIED IN PER NFPA AND LOCAL AHJ.
- RUN ALL FIRE ALARM WIRING IN PRE-FINISHED, UL LISTED RACEWAYS AT FINISHED AREAS.

DRAWN BY: MD
 REVIEWED BY: JDO

PROJECT STATUS:

ISSUE DATE:

SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

SHEET NO. / TITLE:

FA2.1
 BDG 1406 - LEVEL 1
 FIRE ALARM DEVICE
 LAYOUT PLAN

PROJECT NUMBER: KCH2301

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

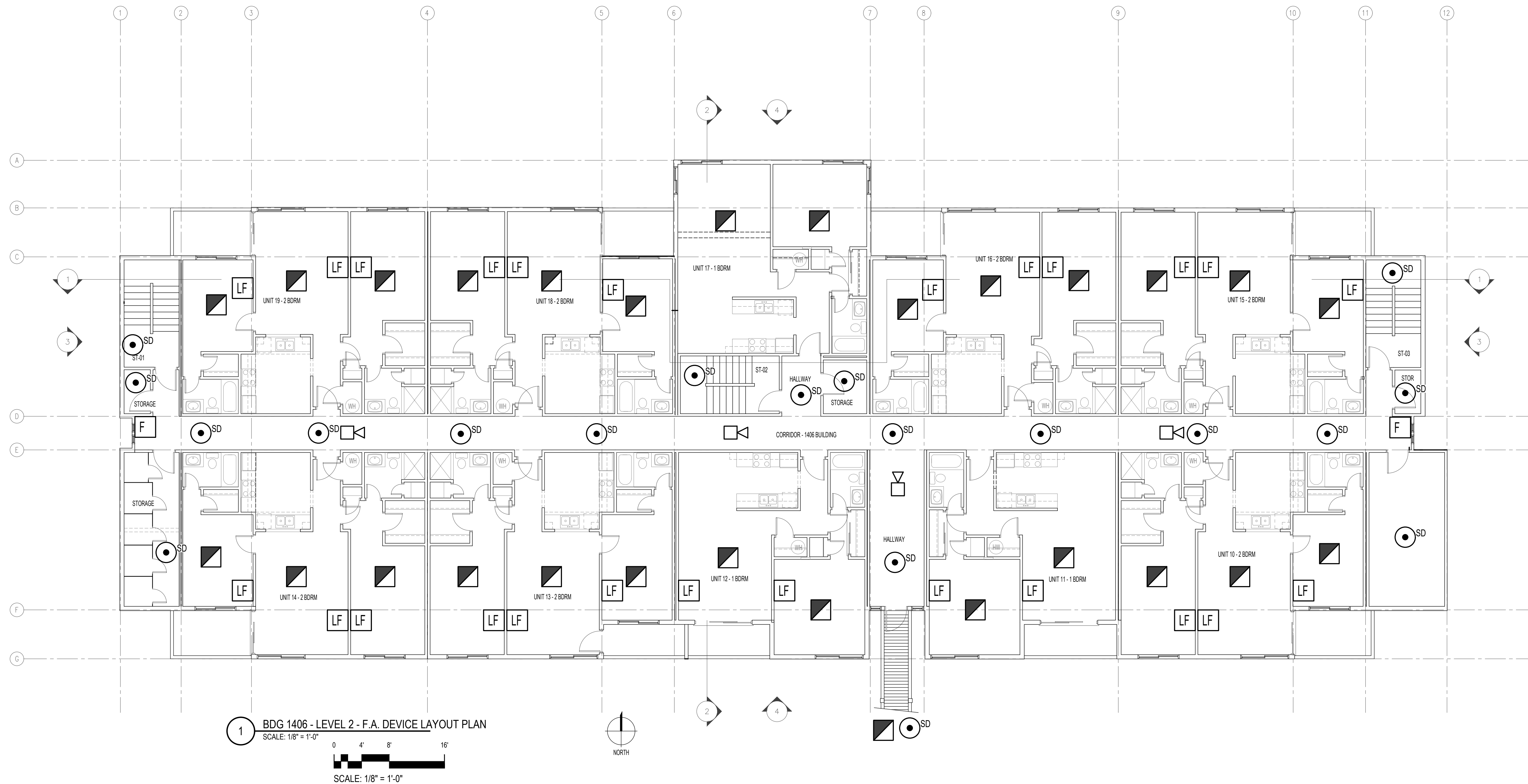
SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

SHEET NO. / TITLE:

FA2.2
BDG 1406 - LEVEL 2
FIRE ALARM DEVICE
LAYOUT PLAN

PROJECT NUMBER: KCH2301



- LEGEND:**
- WALL OR CEILING MOUNT HORN /STROBE
 - LOW FREQUENCY SOUNDER
 - SMOKE ALARM (BATTERY POWERED)
 - PULL STATION
 - WALL OR CEILING STROBE
 - REINY
 - MONITOR/TNAC MODULE
 - NAC/POWER SUPPLY
 - HEAT
 - ANNUNCIATOR
 - RADIO
 - MAIN PANEL
 - SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
 1408 NW RICHMOND BEACH RD,
 SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

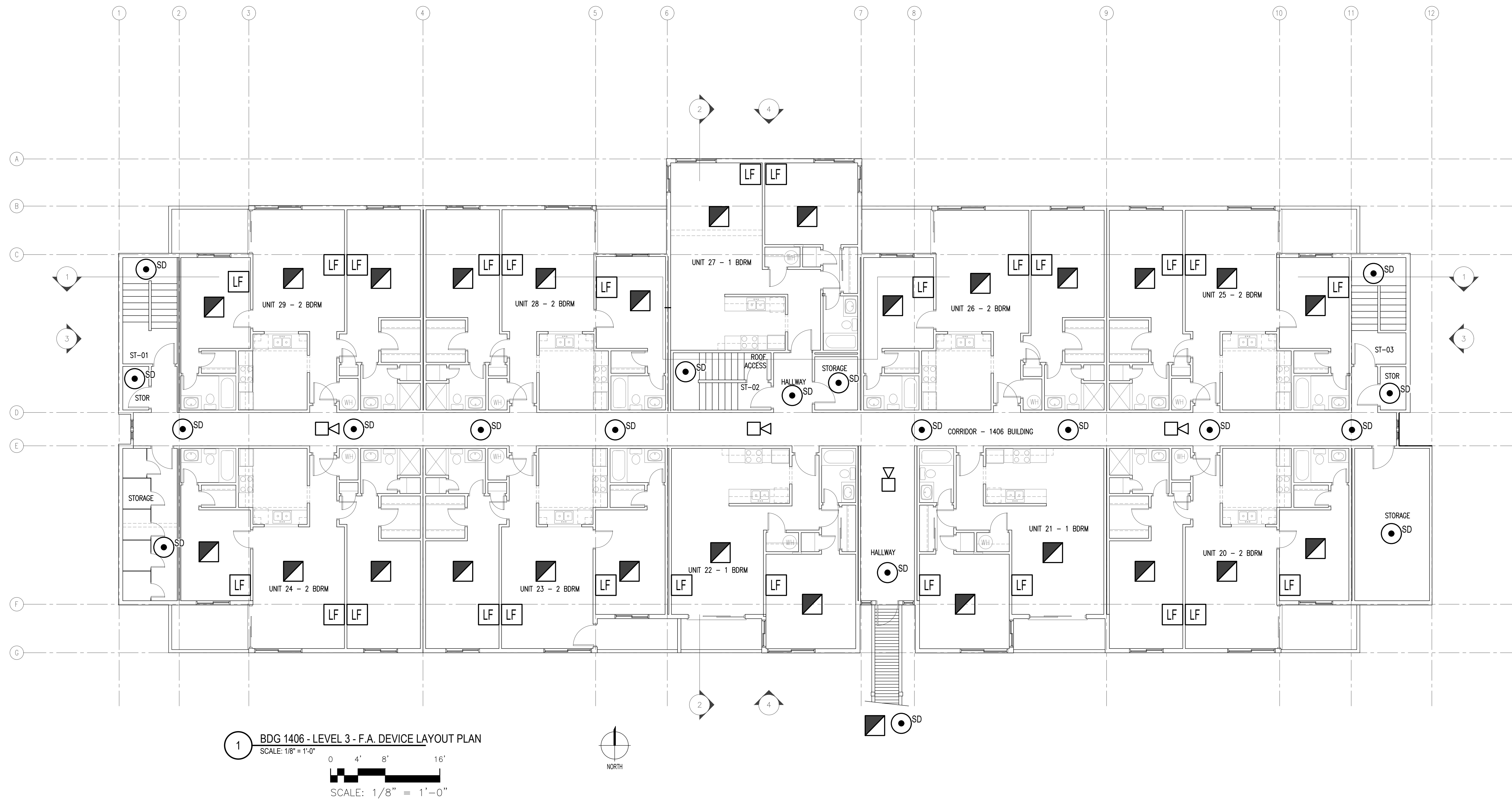
SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

SHEET NO. / TITLE:

FA2.3
BDG 1406 - LEVEL 3
FIRE ALARM DEVICE
LAYOUT PLAN

PROJECT NUMBER: KCH2301

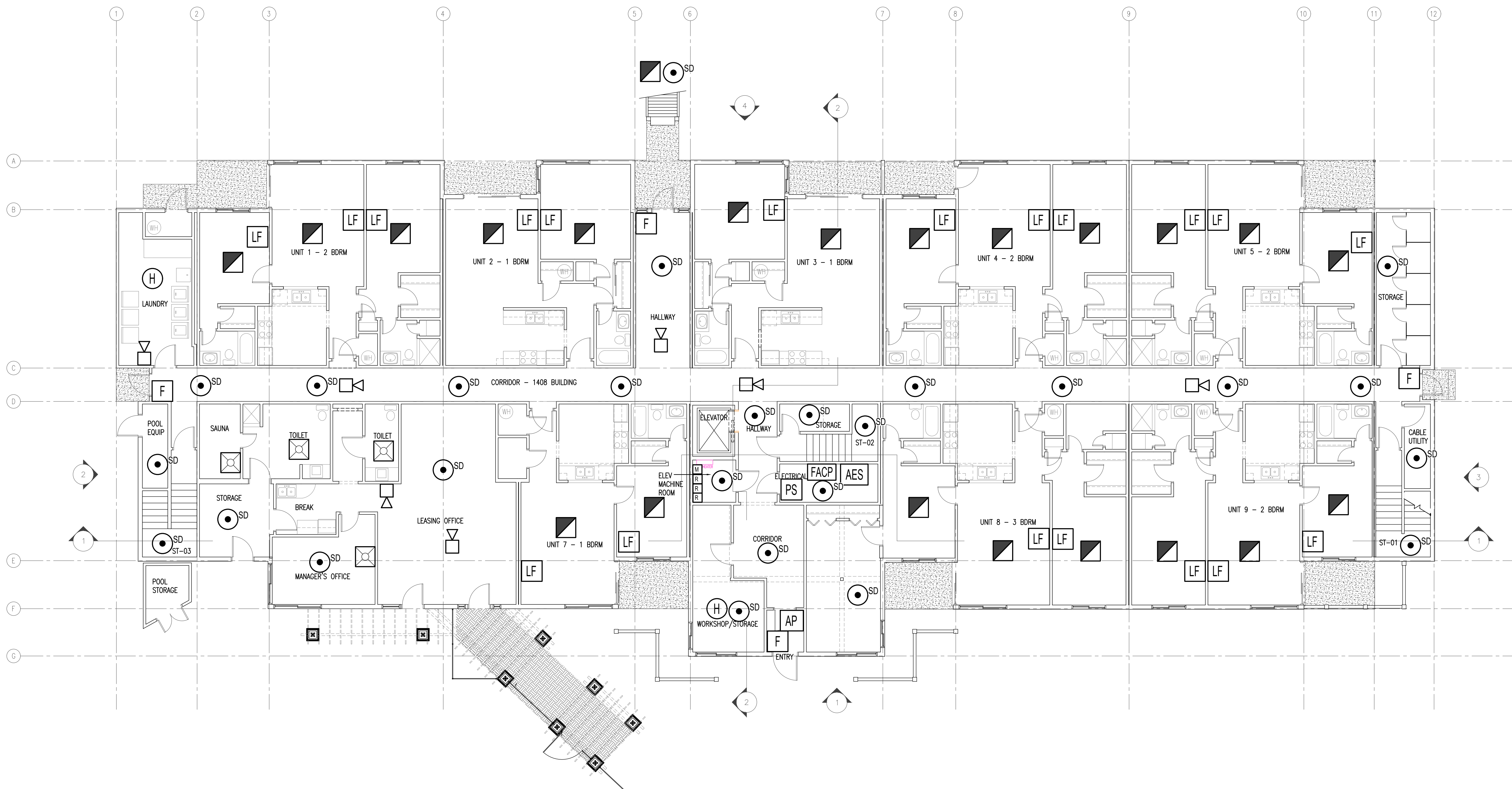


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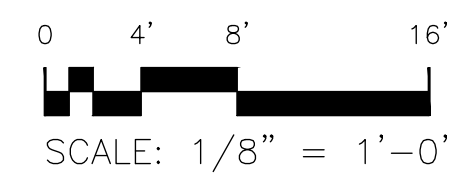
- WALL OR CEILING MOUNT HORN /STROBE
- LOW FREQUENCY SOUNDER
- SMOKE ALARM (BATTERY POWERED)
- PULL STATION
- WALL OR CEILING STROBE
- REINY
- MONITOR/TNAC MODULE
- NAC/POWER SUPPLY
- HEAT
- ANNUNCIATOR
- RADIO
- MAIN PANEL
- SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES





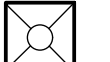








KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
SHORELINE, WA 98177



1 BDG 1408 - LEVEL 1 - F.A. DEVICE LAYOUT PLAN
SCALE: 1/8" = 1'-0"



LEGEND:

-  WALL OR CEILING MOUNT HORN /STROBE
-  LOW FREQUENCY SOUNDER
-  SMOKE ALARM (BATTERY POWERED)
-  PULL STATION
-  WALL OR CEILING STROBE
-  REINY
-  MONITOR/TNAC MODULE
-  NAC/POWER SUPPLY
-  HEAT
-  ANNUNCIATOR
-  RADIO
-  MAIN PANEL
-  SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

BUILDING 1408 GENERAL NOTES:

1. (E) PLAN IS DIAGRAMMATIC TO SHOW NEW FIRE ALARM DEVICE REQUIREMENTS.
2. RE-USE (E) FACP. ADD NAC POWER MODULES AS REQUIRED.
3. FIRE ALARM RISER DESIGNED BY FIRE ALARM VENDOR.
4. REPLACE ALL (E) FIRE ALARM DEVICES AND ADD NEW AS REQUIRED TO MEET JURISDICTIONAL REQUIREMENTS. RETAIN (E) DEVICES IN ELEVATOR LOBBIES, ELEVATOR MACHINE ROOMS AND 1ST FLOOR ELECTRICAL ROOM.
5. MINIMIZE DISTURBANCE OF (E) ACM CEILING AND WALL FINISHES.
6. FOLLOW ALL LOCAL, STATE AND FEDERAL REQUIREMENTS ASSOCIATED W/ ACM DISTURBANCE.
7. VERIFY LOCATION OF EXTERIOR HORN STROBE W/ FIRE MARSHALL.
8. ADA UNITS WILL HAVE EXTRA VISUAL AND AUDIBLE DEVICES (FOR BIDDING PURPOSES ASSUME NO ADA UNITS).
9. ANY HVAC AND OTHER AUXILIARY FIELD EQUIPMENT WILL BE TIED IN PER NFPA AND LOCAL AHJ.
10. UNITS IN 1404 AND 1408 ARE SIMILAR. BOTH HAVE ADDRESSIBLE FACP'S AND BOTH ARE 3-STORY.
10. RUN ALL FIRE ALARM WIRING IN PRE-FINISHED, UL LISTED RACEWAYS AT FINISHED AREAS.

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

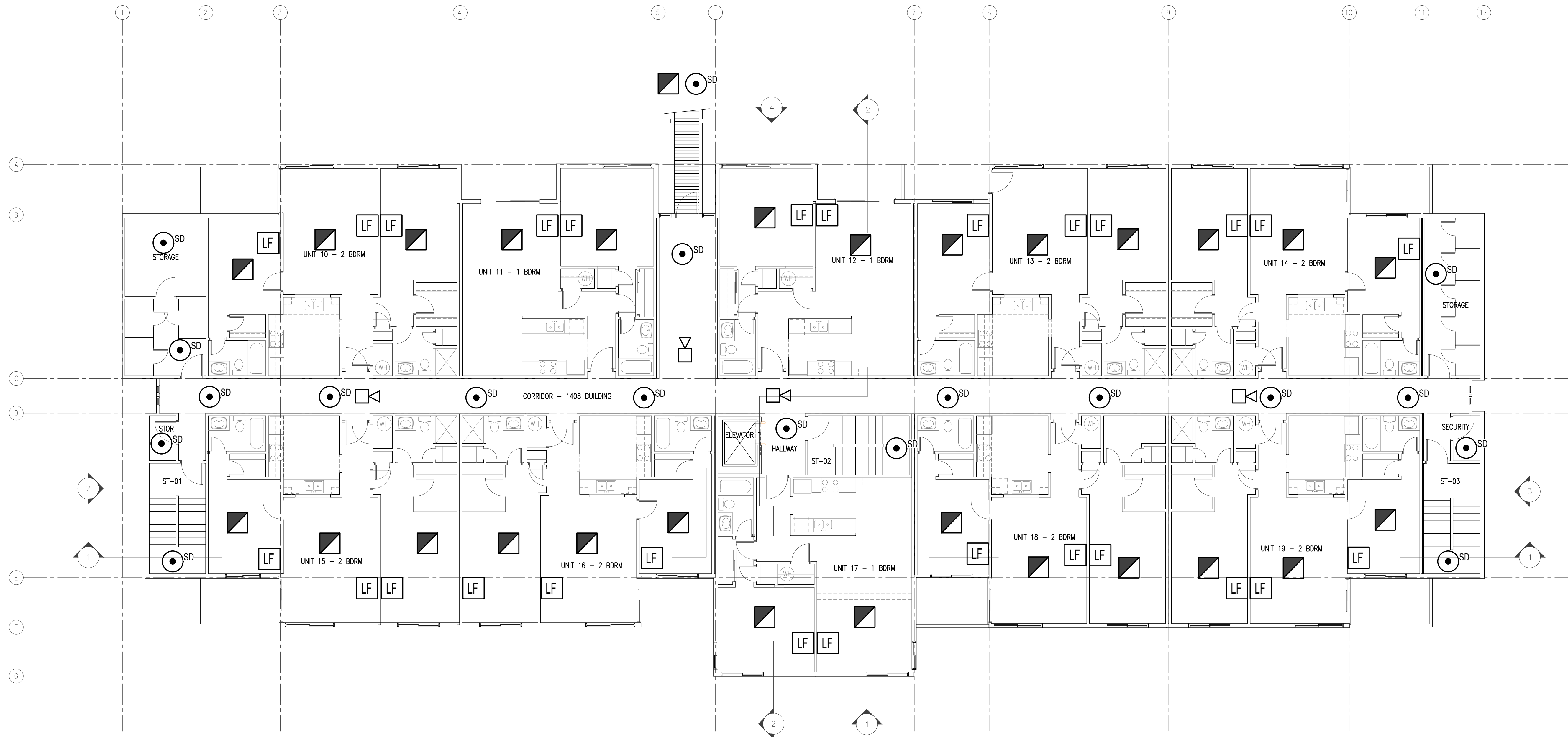
SHEET NO. / TITLE:

FA3.1
BDG 1408 - LEVEL 1
FIRE ALARM DEVICE
LAYOUT PLAN

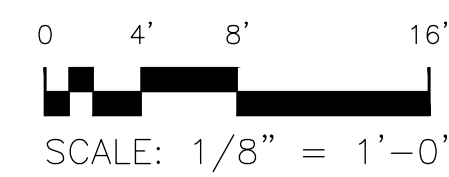
PROJECT NUMBER: KCH2301

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES







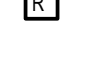

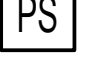




KING COUNTY HOUSING AUTHORITY
 1408 NW RICHMOND BEACH RD,
 SHORELINE, WA 98177



1 BDG 1408 - LEVEL 2 - F.A. DEVICE LAYOUT PLAN
 SCALE: 1/8" = 1'-0"



LEGEND:

-  WALL OR CEILING MOUNT HORN /STROBE
-  LOW FREQUENCY SOUNDER
-  SMOKE ALARM (BATTERY POWERED)
-  PULL STATION
-  WALL OR CEILING STROBE
-  REINY
-  MONITOR/TNAC MODULE
-  NAC/POWER SUPPLY
-  HEAT
-  ANNUNCIATOR
-  RADIO
-  MAIN PANEL
-  SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

SHEET NO. / TITLE:

FA3.2
 BDG 1408 - LEVEL 2
 FIRE ALARM DEVICE
 LAYOUT PLAN

PROJECT NUMBER: KCH2301

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

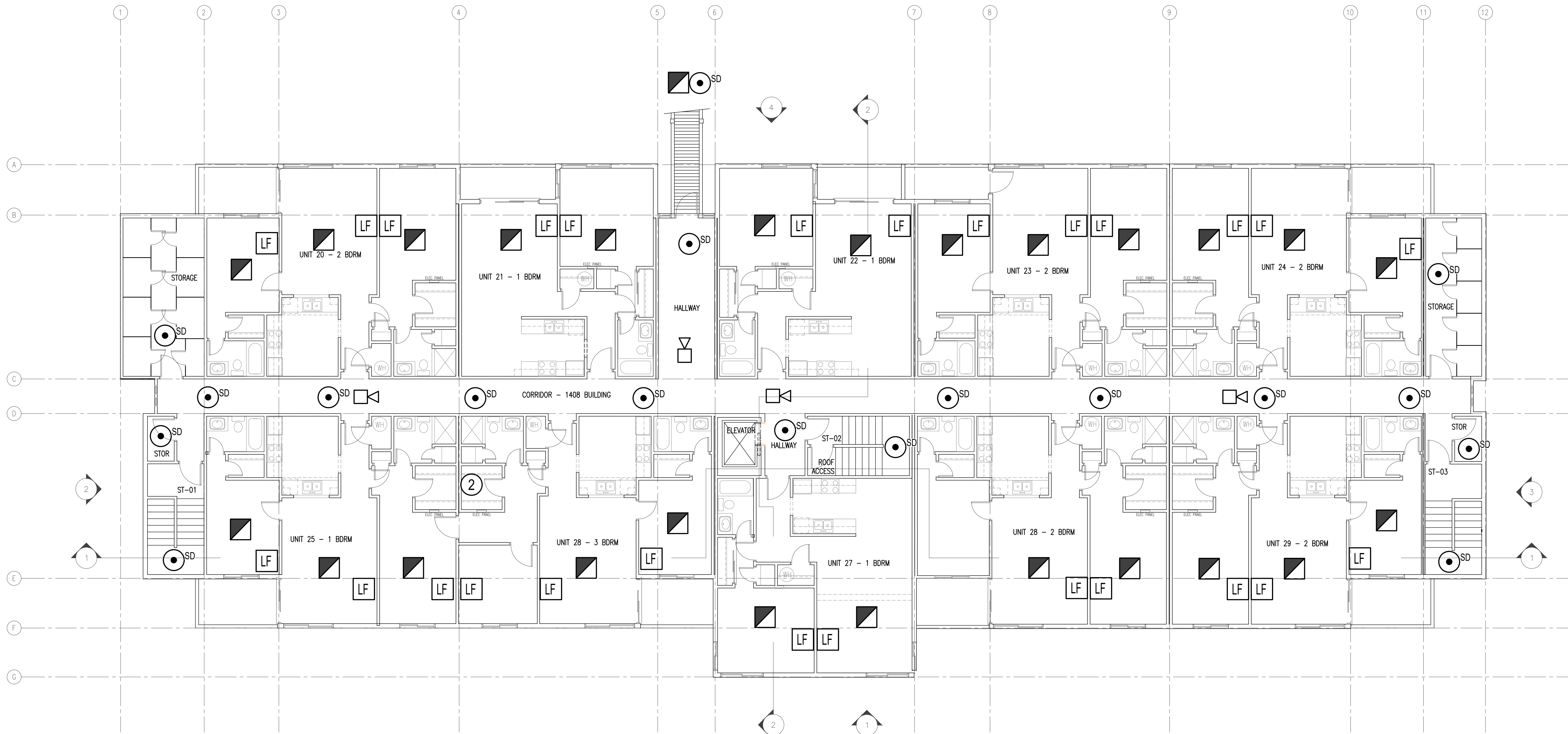
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ARCH D (24" x 36")

DRAWING SCALE:

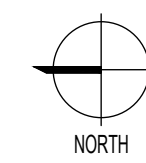
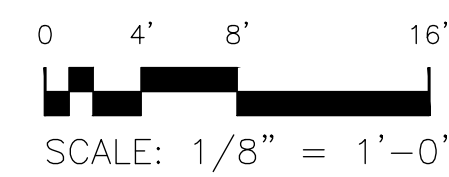
SHEET NO. / TITLE:

FA3.3
BDG 1408 - LEVEL 3
FIRE ALARM DEVICE
LAYOUT PLAN







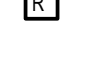
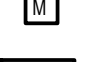





PROJECT NUMBER: KCH2301



1 **BDG 1408 - LEVEL 3 - F.A. DEVICE LAYOUT PLAN**
SCALE: 1/8" = 1'-0"



LEGEND:

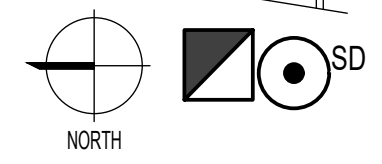
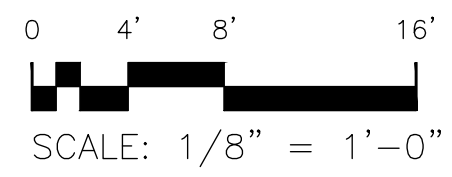
-  WALL OR CEILING MOUNT HORN /STROBE
-  LF LOW FREQUENCY SOUNDER
-  SMOKE ALARM (BATTERY POWERED)
-  F PULL STATION
-  WALL OR CEILING STROBE
-  REINY
-  MONITOR/TNAC MODULE
-  PS NAC/POWER SUPPLY
-  H HEAT
-  AP ANNUNCIATOR
-  AES RADIO
-  FACP MAIN PANEL
-  SD SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
 1408 NW RICHMOND BEACH RD,
 SHORELINE, WA 98177



1 BDG 1410 - LEVEL 1 - F.A. DEVICE LAYOUT PLAN
 SCALE: 1/8" = 1'-0"



LEGEND:

- WALL OR CEILING MOUNT HORN /STROBE
- LOW FREQUENCY SOUNDER
- SMOKE ALARM (BATTERY POWERED)
- PULL STATION
- WALL OR CEILING STROBE
- REINY
- MONITOR/TNAC MODULE
- NAC/POWER SUPPLY
- HEAT
- ANNUNCIATOR
- RADIO
- MAIN PANEL
- SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

KEY NOTES:

- ① EXTERIOR HORN STROBE. COORDINATE LOCATION W/ LOCAL FIRE MARSHAL.

BUILDING 1410 GENERAL NOTES:

1. (E) PLAN IS DIAGRAMMATIC TO SHOW NEW FIRE ALARM DEVICE REQUIREMENTS.
2. REPLACE FIRE ALARM PANEL AND REPLACE NAC POWER SUPPLIES AS REQUIRED.
3. FIRE ALARM RISER DESIGNED BY FIRE ALARM VENDOR.
4. REPLACE ALL (E) FIRE ALARM DEVICES AND ADD NEW AS REQUIRED TO MEET JURISDICTIONAL REQUIREMENTS
5. MINIMIZE DISTURBANCE OF (E) ACM CEILING AND WALL FINISHES.
 FOLLOW ALL LOCAL, STATE AND FEDERAL REQUIREMENTS ASSOCIATED W/ ACM DISTURBANCE.
6. VERIFY LOCATION OF EXTERIOR HORN STROBE W/ FIRE MARSHALL.
7. ADA UNITS WILL HAVE EXTRA VISUAL AND AUDIBLE DEVICES (FOR BIDDING PURPOSES ASSUME NO ADA UNITS).
8. ANY HVAC AND OTHER AUXILIARY FIELD EQUIPMENT WILL BE TIED IN PER NFPA AND LOCAL AHJ.
9. RUN ALL FIRE ALARM WIRING IN PRE-FINISHED, UL LISTED RACEWAYS AT FINISHED AREAS.

DRAWN BY: MD	REVIEWED BY: JDO
PROJECT STATUS:	
ISSUE DATE:	
SHEET SIZE: ARCH D (24" x 36")	
DRAWING SCALE:	
SHEET NO. / TITLE: FA4.1 BDG 1410 - LEVEL 1 FIRE ALARM DEVICE LAYOUT PLAN	
PROJECT NUMBER: KCH2301	

MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
SHORELINE, WA 98177

DRAWN BY: **MD** REVIEWED BY: **JDO**

PROJECT STATUS:

ISSUE DATE:

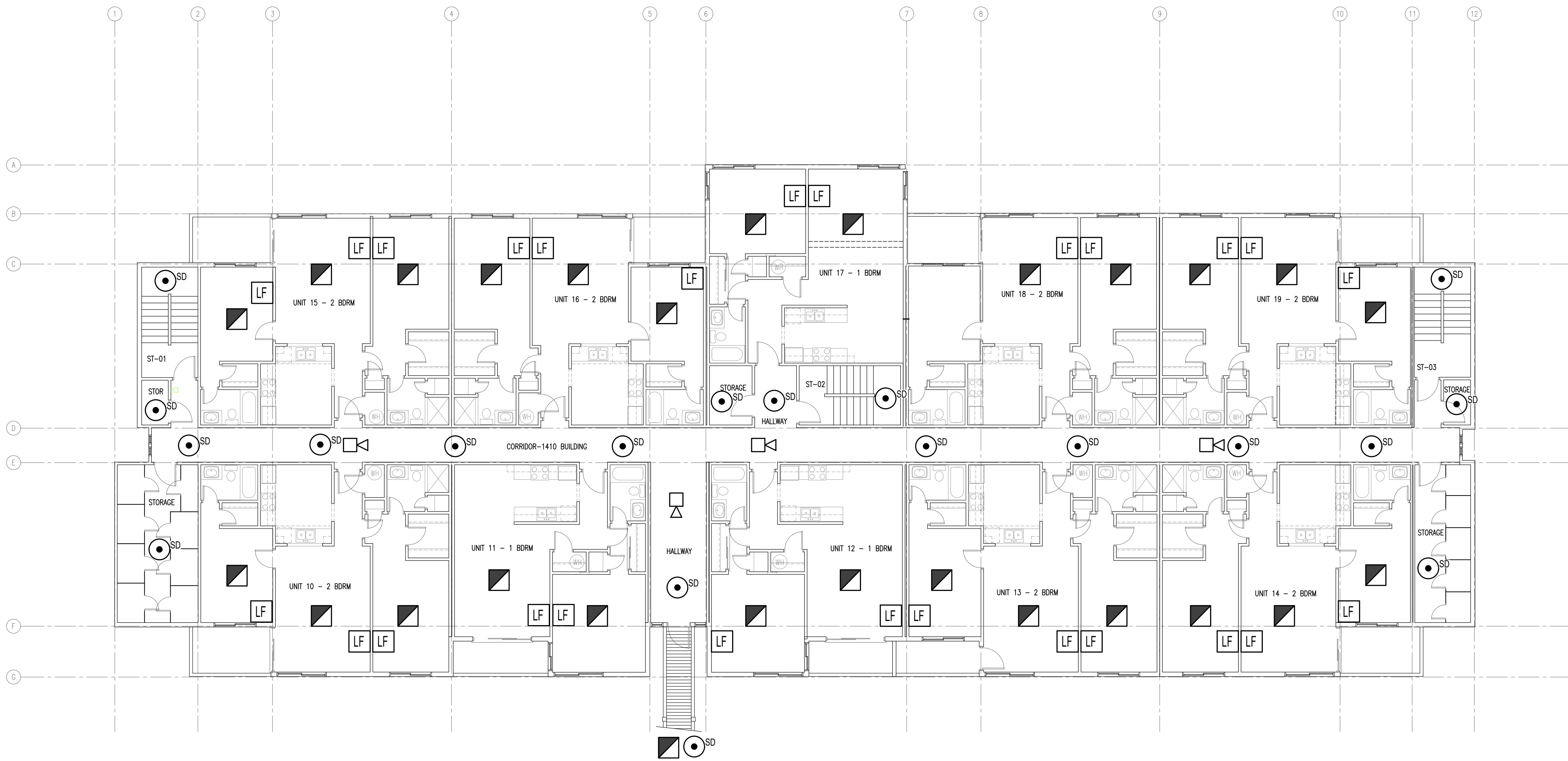
SHEET SIZE:
ARCH D (24" x 36")

DRAWING SCALE:

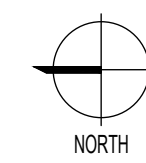
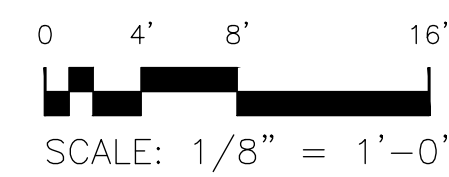
SHEET NO. / TITLE:

FA4.2
BDG 1410 - LEVEL 2
FIRE ALARM DEVICE
LAYOUT PLAN







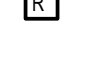

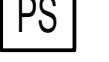




PROJECT NUMBER: KCH2301



1 **BDG 1410 - LEVEL 2 - F.A. DEVICE LAYOUT PLAN**
SCALE: 1/8" = 1'-0"



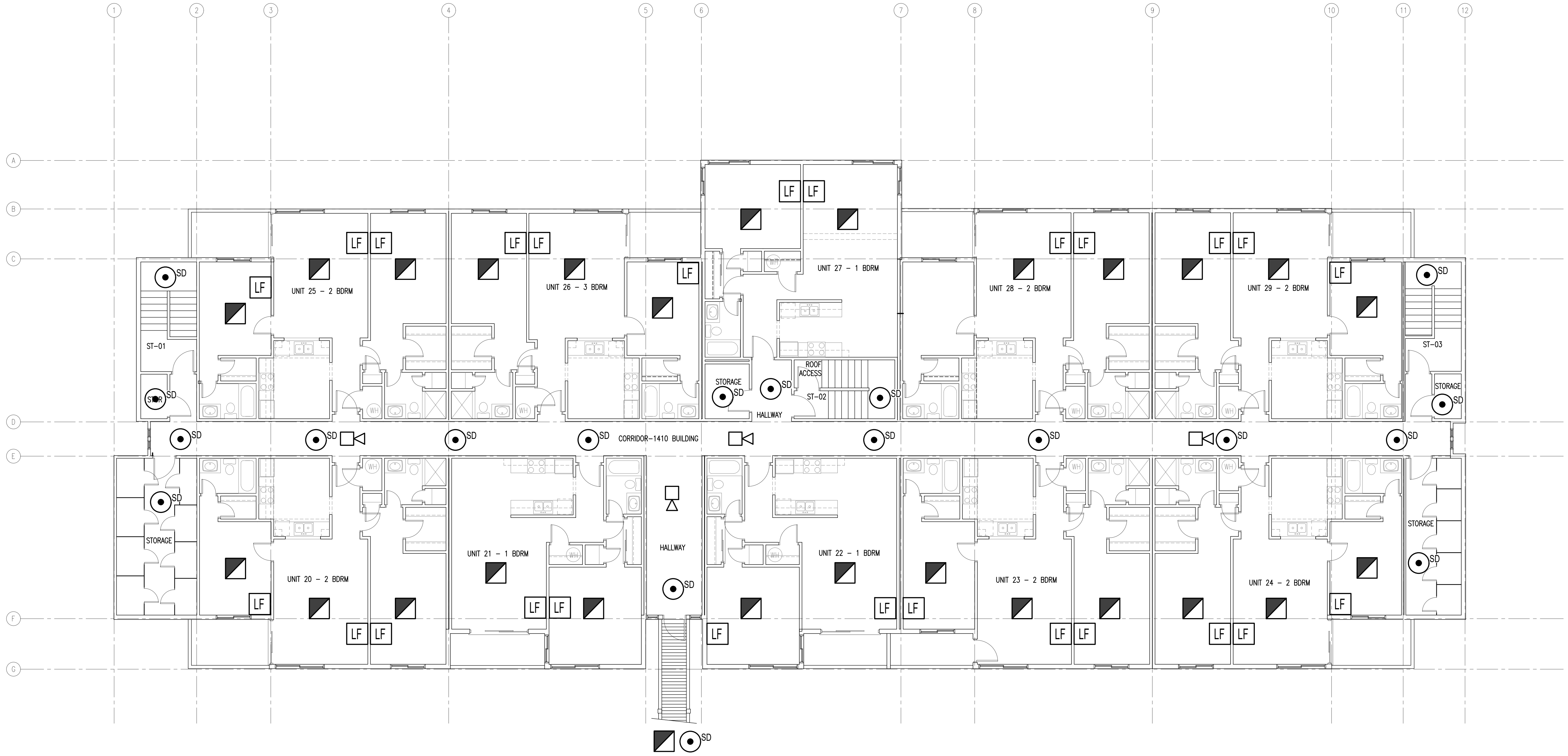
LEGEND:

-  WALL OR CEILING MOUNT HORN /STROBE
-  LOW FREQUENCY SOUNDER
-  SMOKE ALARM (BATTERY POWERED)
-  PULL STATION
-  WALL OR CEILING STROBE
-  REINY
-  MONITOR/TNAC MODULE
-  NAC/POWER SUPPLY
-  HEAT
-  ANNUNCIATOR
-  RADIO
-  MAIN PANEL
-  SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

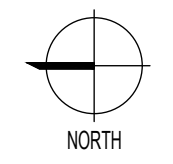
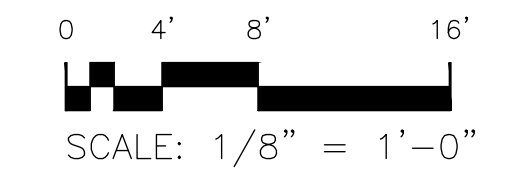
MEADOWBROOK APARTMENTS FIRE ALARM UPGRADES

KING COUNTY HOUSING AUTHORITY
1408 NW RICHMOND BEACH RD,
SHORELINE, WA 98177

DRAWN BY: MD	REVIEWED BY: JDO
PROJECT STATUS:	
ISSUE DATE:	
SHEET SIZE: ARCH D (24" x 36")	
DRAWING SCALE:	
SHEET NO. / TITLE: FA4.3 BDG 1410 - LEVEL 3 FIRE ALARM DEVICE LAYOUT PLAN	
PROJECT NUMBER: KCH2301	



1 **BDG 1410 - LEVEL 3 - F.A. DEVICE LAYOUT PLAN**
SCALE: 1/8" = 1'-0"



LEGEND:

- WALL OR CEILING MOUNT HORN /STROBE
- LOW FREQUENCY SOUNDER
- SMOKE ALARM (BATTERY POWERED)
- PULL STATION
- WALL OR CEILING STROBE
- REINY
- MONITOR/TNAC MODULE
- NAC/POWER SUPPLY
- HEAT
- ANNUNCIATOR
- RADIO
- MAIN PANEL
- SMOKE DETECTOR (HARD-WIRED BACK TO FACP)

INSTRUCTIONS TO BIDDERS

1.0 BIDDER RESPONSIBILITY CRITERIA

- A. It is the intent of Owner to award a contract to a responsible bidder submitting the lowest responsive bid. Before award, the bidder must meet the following bidder responsibility criteria to be considered a responsible bidder. The bidder may be required by the Owner to submit documentation demonstrating compliance with the criteria. The bidder must:
1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of bid submittal;
 2. Have a current Washington Unified Business Identifier (UBI) number;
 3. If applicable, have industrial insurance coverage for the bidder's employees working in Washington as required in Title 51 RCW; an employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW;
 4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3);
 5. Have received training on the requirements related to public works and prevailing wage under chapter 39.04.350 RCW and chapter 39.12 RCW or be listed as exempt by the department of labor and industries on its website; and
 6. Within the three-year period immediately preceding the date of the bid solicitation, not have been determined by a final and binding citation and notice of assessment issued by the department of labor and industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48, or 49.52 RCW;
 7. Before award of a public works contract, a bidder shall submit to the contracting agency a signed statement in accordance with RCW 9A.72.085 verifying under penalty of perjury that the bidder is in compliance with the responsible bidder criteria requirement of subsection A, 6 of this section.

1.1 SUBCONTRACTOR RESPONSIBILITY

- A. The Contractor shall include the language of this section in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the Contractor shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this section apply to all subcontractors regardless of tier.
- B. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:
1. Have a current certificate of registration in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
 2. Have a current Washington Unified Business Identifier (UBI) number;
 3. If applicable, have:
 - a. Have Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;
 - b. A Washington Employment Security Department number, as required in Title 50 RCW;

INSTRUCTIONS TO BIDDERS

- c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - d. An electrical contractor license, if required by Chapter 19.28 RCW;
 - e. An elevator contractor license, if required by Chapter 70.87 RCW.
4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3);
 5. Have received training on the requirements related to public works and prevailing wage under chapter 39.04.350 RCW and chapter 39.12 RCW or be listed as exempt by the department of labor and industries on its website; and
 6. Within the three-year period immediately preceding the date of the bid solicitation, not have been determined by a final and binding citation and notice of assessment issued by the department of labor and industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48, or 49.52 RCW.

1.2 SUPPLEMENTAL BIDDER RESPONSIBILITY CRITERIA

- A. RCW 39.04.350(2) specifically authorizes municipalities to adopt relevant supplement criteria for determining bidder responsibility applicable to a particular project which the bidder must meet.
- B. For the work in this project a responsible/qualified Bidder must meet the following standards:
 1. Have a current certificate of registration as a contractor, in compliance with chapter 18.27 RCW, for the last three years under the same business name;
 2. Have a good record of past performance that includes, but is not limited to, high quality work, ability to complete projects on time, contractor's integrity, compliance with public policy, financial, contractual and tax obligations, as well as Federal and State rules and regulations in performing construction contracts.
 3. Have a current Experience Modification Rate (EMR) of 1.0 or less, or an average EMR rate of 1.0 or less over the last three years. The requirement may, at the Owner's sole discretion, be waived on review of a written explanation that includes details of accidents, L&I records, a Loss Ratio Report for the last five years, costs, dates of events, and changes that have been made by the contractor to reduce accidents. A current company Safety Plan shall also be reviewed.
 4. Bidder shall provide evidence of previous successful completion of fire alarm system projects, of similar scope and complexity. Poor performance, lack of response, or failure to complete projects successfully within the contract time may be grounds for the rejection of bidder.
- C. Subcontractors shall have had three years minimum experience licensed in Washington State in the specific specialty contracting business.

1.3 PREPARATION OF BIDS – CONSTRUCTION

- A. Bids must be submitted on the Bid Form furnished by the Owner.
- B. All fields and questions on required forms must be fully answered and complete. Failure to do so may result in the bid being declared non-responsive.

INSTRUCTIONS TO BIDDERS

- C. Bidders shall acknowledge receipt of all addenda to this solicitation by inserting the addenda numbers in the space provided on the Bid Form. Failure to do so may result in the bid being declared non-responsive.
 - 1. Bidder is responsible for checking KCHA's website for addenda prior to submitting bid.
- D. In order for a bid to be considered responsive, bidders must submit the following signed documents with their bid package:
 - 1. Bid Form
 - 2. Bidder's Information Form
 - 3. Bid Guarantee
- E. The Bidder agrees to hold the base bid prices for sixty (60) days from date of bid opening.

1.4 BID GUARANTEE

- A. A bid guarantee in the amount of 5% of the base bid amount is required. Failure of the bidder to provide bid guarantee shall render the bid non-responsive.
- B. Acceptable forms of bid guarantee are: A bid bond or postal money order, or certified check or cashier's check made payable to King County Housing Authority.
- C. The Owner will return bid guarantees (other than bid bonds) to unsuccessful bidders as soon as practicable, but not sooner than the execution of a contract with the successful bidder. The successful bidder's bid guarantee will be returned to the successful bidder with its official notice to proceed with the work of the contract.

1.5 AMENDMENTS TO INVITATION TO BID

- A. If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.
- B. Bidders shall acknowledge receipt of all addenda to this solicitation by inserting the addenda numbers in the space provided on the Bid Form. Failure to do so may result in the bid being declared non-responsive.
 - 1. Bidder is responsible for checking KCHA's website for addenda prior to submitting bid.
 - 2. Addenda will not be issued later than three (3) calendar days before the deadline for receipt of Bids except Addendum withdrawing the request for Bids or extending the deadline for receipt of Bids.

1.6 PRE-BID MEETING

- A. All potential bidders are strongly encouraged to attend. Oral statements may not be relied upon and will not be binding or legally effective.

1.7 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE

INSTRUCTIONS TO BIDDERS

- A. Before submitting a bid, the Bidder shall carefully examine each component of the Contract Documents prepared for the Work and any other available supporting data so as to be thoroughly familiar with all the requirements.
- B. The Bidder shall obtain copies of all agencies and associations guidelines and standards cited in the Contract Documents and necessary to perform the Work, including full size reproductions of material provided by Owner, at their own expense.
- C. The Bidder shall make a thorough and reasonable examination of the project site, facility and conditions under which the Work is to be performed, including but not limited to: Building access; resident occupancy; fire lanes; landscaping; obstacles and character of materials which may be encountered; traffic conditions; public and private utilities; the availability and cost of labor; and available facilities for transportation, handling, and storage of materials and equipment.

1.8 EXPLANATION TO PROSPECTIVE BIDDERS

- A. Any prospective bidder desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must submit a request in writing to the Owner seven (7) calendar days before the bid due date. Oral explanations or instructions given before the award of a contract will not be binding. Questions shall be submitted to:

Michelle Jackson
King County Housing Authority
600 Andover Park W
Seattle, WA 98188
Email: MichelleJ@kcha.org

1.9 PREVAILING WAGES

- A. Contractor shall pay no less than the Washington State Department of Labor and Industries (L&I) prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with RCW 39.12 and the rules and regulations of L&I. The schedule of prevailing wage rates for the locality or localities of the Work is determined by the Industrial Statistician of L&I. It is the Contractor's responsibility to verify the applicable prevailing wage rate.
 - 1. L&I prevailing wage rates may be found at <https://lni.wa.gov/licensing-permits/public-works-projects/prevailing-wage-rates/>
 - 2. The Owner has determined that the work meets the definition of residential construction.
 - 3. The prevailing wage rates publication date is determined by the bid due date.
 - 4. The work is to be performed in King County.
 - 5. A copy of the prevailing wage rates is available at KCHA.
 - 6. A copy of the prevailing wage rates may be mailed on request.

1.10 TAXES

- A. All taxes imposed by law shall be included in the bid amount. The Contractor shall pay the WSST to the Department of Revenue and shall furnish proof of payment to the Owner if requested.

INSTRUCTIONS TO BIDDERS

- B. The retail sales tax does not apply to the gross contract price.
- C. Prime and subcontractors are required to pay retail sales tax upon all purchases of materials, including prefabricated and precast items, equipment, leases or rentals of tools, consumables, and other tangible personal property which is installed, applied, attached, or otherwise incorporated in their work.

1.11 INSURANCE

Must, for the duration of the contract, procure and maintain Builders Risk insurance as stated in Part 2 of the General Conditions. This shall be in addition to General Liability and Automobile Liability Coverage.

1.12 ASSURANCE OF COMPLETION

- A. Payment and performance bonds for 100% of the Contract Sum, including all Change Orders and taxes imposed by law, shall be furnished for the Work, and shall be in a form acceptable to the Owner.

1.13 BID ERROR

- A. In the event Bidder discovers an error in its bid, the Bidder may, under certain conditions and if before the date and time that bids are due, modify, their bid, as detailed below:
 - 1. Prior to Date and Time Bids are Due:
 - a. A Bidder may withdraw its bid at any time prior to the date and time bids are due upon written request.
 - b. After withdrawing an original submitted bid, a Bidder may modify and resubmit its bid at any time prior to the date and time bids are due.
 - 2. After the Date and Time Bids are Due:
 - a. A bidder who submits an erroneous low bid may withdraw the bid. The bid withdrawal is permissible if there was an obvious error in the low bid, and the mistake is readily apparent from the bid itself.
 - b. Notification: Provide to the Owner, within 24 hours of bid opening, written notification of the bidder's intent to withdraw the bid due to error.
 - c. Documentation: Provide to the Owner within 48 hours of bid opening, documentation sufficient in content to justify bid withdrawal to the satisfaction of the Owner. Include description and evidence of the error.
 - d. Approval: the Owner will approve or reject the request for withdrawal in writing.
 - e. Any low bidder who withdraws its bid is prohibited from bidding on the same project if it is subsequently re-solicited.

INSTRUCTIONS TO BIDDERS

1.14 ADDITIVE OR DEDUCTIVE BID ITEMS

- A. The low bid, for purposes of award, shall be the lowest responsive bid from a qualified responsible bidder offering the low aggregate amount for the base bid, plus additive or deductive bid alternates selected by the Owner.

1.15 BID EVALUATION

- A. Responsive Bids: A bid will be considered responsive if it meets the conditions of the solicitation, in addition to but not limited to the following requirements:
 - 1. Bid is received not later than the time and date specified.
 - 2. Bid is submitted in the proper format on the form(s) provided.
 - 3. Bid includes the complete scope of work as defined in bid package.
 - 4. Bid does not include any exclusions or qualifications.
 - 5. Bid includes Unit and Lump Sum Costs as listed in Proposal Form.
 - 6. Forms are complete.
- B. After bid opening, bids will be checked for correctness of bid item prices, extensions and the total bid price. Discrepancies shall be resolved by accepting the bid item prices and the corrected extensions and total bid price.
- C. Responsible Bidders: the Owner will award contracts only to responsible bidders who demonstrate the ability to successfully perform under the terms and conditions as set forth in the Contract Documents and have successfully completed projects similar in scope and complexity.
 - 1. Bidders must demonstrate relevant experience on similar types of projects and submit detailed information as required on the Bidder Information Form.
- D. The Owner reserves the right to contact references and investigate past performance and qualifications of the Bidder, subcontractor, and project team members, including contacting third parties and/or the references provided by the Bidder.
 - 1. The Owner may contact references for other projects including those the Bidder did not identify and/or provided references.
 - 2. References may be asked to rate the performance of and describe their experience with project team members and subcontractors. Bidder Information may be solicited and evaluated on the following subjects: type and features of work; overall quality of project performance and quality of work; experience and technical knowledge and competence of the Bidder and Project Team Members; ability, capacity and skill to perform the Work; ability to manage submittals, requests for information, prevailing wage filings, and other paperwork; compliance with laws, ordinances, and contract provisions; and other information as deemed necessary.
 - 3. Poor reference(s) may be justification to determine a Bidder is not responsible.
- E. At the Owner's request, provide any additional explanation or information, which would assist in evaluating the qualifications of the Bidder, subcontractors, project team members, and bid price.
- F. The Owner will verify information submitted and if the lowest bidder is determined to be “not responsible,” the Owner will issue, in writing, the specific reasons for this determination. The bidder may appeal this decision. The appeal must be in writing and shall be delivered to the

INSTRUCTIONS TO BIDDERS

Owner within two business days. The appeal may include additional information that was not included in the original bid documents. KCHA will make a final determination after the receipt of the appeal. The final determination may not be appealed.

1.16 CONTRACT AWARD

- A. Bonding and Insurance: Contract award will be contingent on ability to secure payment/performance bonding, and Contractor's ability to meet the Owner insurance requirements as detailed in the Bid Documents.
- B. Must, for the duration of the contract, procure and maintain Builders Risk insurance as stated in Part 2 of the General Conditions. This shall be in addition to General Liability, Automobile Liability, and Professional Liability/Errors and Omissions (if applicable) Coverage.
- C. Bonding, insurance certificate with endorsements, and an approved Statement of Intent to Pay Prevailing Wages shall be submitted to the Owner within 14 days of contract award. A Notice to Proceed shall be issued immediately after receipt.
- D. Right to Reject Bids/Waiver: The Owner reserves the right to reject any or all bids or to waive any informalities or irregularities in the bidding.
- E. Retainage Funds: The Owner will not pay interest to the Contractor for accounts where retainage funds are maintained by the Owner. As part of the procurement by which the Contractor was selected for this work, the Contractor agrees to waive any other options and has made allowances for this waiver.

GENERAL CONDITIONS

PART 1 - GENERAL PROVISIONS

1.1 DEFINITIONS

- A. "Authority Having Jurisdiction (AHJ)": A federal, state, local, or other regional department, or an individual such as a fire official, labor department, health department, building official, or other individual having statutory authority.
- B. "Contract Documents" means the Instructions to Bidders, Specifications, Plans, General Conditions, Prevailing Wage Rates, Bid Form, Contract Form, other Special Forms, Drawings and Specifications, and all Addenda and modifications thereof.
- C. "Contract Sum" is the total amount payable by Owner to Contractor for performance of the Work in accordance with the Contract Documents.
- D. "Contract Time" is the number of consecutive Days allotted in the Contract Documents for achieving completion of the Work.
- E. "Contracting Officer" means the person delegated the authority by King County Housing Authority to enter into, and/or terminate this Contract. The term includes any successor Contracting Officer and any duly authorized representative of the Contracting Officer.
- F. "Contractor" means the person or other entity entering into the Contract with King County Housing Authority to perform all of the services or work required under the Contract.
- G. "Day" means calendar day, unless otherwise specified.
- H. "Final Acceptance" means the acceptance by Owner that the Contractor has completed the requirements of the Contract Documents.
- I. "Force Majeure" means those acts entitling Contractor to request an equitable adjustment in the Contract Time, including, but not limited to, unusually severe weather conditions which could not have been reasonably anticipated.
- J. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- K. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- L. "Liquidated Damages" means the amount prescribed in the Contract Documents to be deducted from any payments due or to become due Contractor, for each day's delay in completion of the Work beyond the time allowed in the Contract Documents as stated in the Notice to Proceed, plus any extensions of such time.
- M. "Manager" means the person who is an authorized agent of the King County Housing Authority to administer the Contract.
- N. "Notice to Proceed" means a notice from Owner to Contractor that defines the date on which the Contract Time begins to run.
- O. "Owner" means the King County Housing Authority or its authorized representative with the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents and make related determinations and findings.
- P. "Property Manager" means the property management company, its officers and employees.
- Q. "Provide": Furnish and install, complete and ready for the intended use.

GENERAL CONDITIONS

- R. "Subcontract" means any contract, purchase order, or other purchase agreement, including modifications and change orders to the foregoing, entered into by a Subcontractor to furnish supplies, materials, equipment, and services for the performance of the prime Contract or a subcontract.
- S. "Subcontractor" means any supplier, vendor, or firm that furnishes supplies, materials, equipment, or services to or for the Contractor or another Subcontractor.
- T. "Work" means the construction and services required by the Contract Documents, and includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents.

1.2 EXECUTION AND INTENT

- A. The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Contract Documents.
- B. All work is to be executed in accordance with the Building Codes, as adopted by the Authority Having Jurisdiction, and other applicable codes and generally accepted industry standards. All products and materials are to be new and handled and applied in accordance with the manufacturer's recommendations.
- C. Contractor makes the following representations to Owner:
 - 1. The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents;
 - 2. Contractor has carefully reviewed the Contract Documents, had an opportunity to visit and examine the Project site, has become familiar with the local conditions in which the Work is to be performed, and has satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor, materials, equipment, goods, supplies, work, permits, services and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof.
- D. The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.

PART 2 - INSURANCE AND BONDS

2.1 INSURANCE REQUIREMENTS FOR BUILDING TRADES CONTRACTORS

- A. Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or Subcontractors.

2.2 MINIMUM SCOPE OF INSURANCE

- A. Contractors shall maintain coverages no less than:
 - 1. Insurance Services Office Commercial General Liability coverage including Products/Completed Operations.
 - 2. Insurance Services Office covering Automobile Liability, code 1 (any auto).
 - 3. Workers' Compensation insurance as required by State law and Employer's Liability Insurance.
 - 4. Builders Risk (Property / Course of Construction insurance covering for all risks of loss for all projects in excess of \$250,000.00).

GENERAL CONDITIONS

2.3 MINIMUM LIMITS OF INSURANCE

A. Contractor shall maintain limits no less than:

1. General Liability: \$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit of \$2,000,000.
2. Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
3. Employer's Liability: \$1,000,000 per accident for bodily injury/sickness or disease.
4. Builders Risk (Property) / Course of Construction: Completed value of project.

2.4 DEDUCTIBLES AND SELF INSURED RETENTION

- ### A.
- Any deductibles or self-insured retentions must be declared to and approved by the Owner. At the option of the Owner, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Owner, its officers, officials, employees and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the Owner guaranteeing payment of losses and related investigations, claim administration and defense expenses. **NOTE: If this contract deals with hazardous materials or activities (i.e. lead based paint, asbestos, armed security guards) additional provisions covering those exposures must be included in order to protect the Owner's interests.**

2.5 OTHER INSURANCE PROVISIONS

A. The policies are to contain, or be endorsed to contain, the following provisions:

1. The Owner, the Property Manager, its officers, officials, employees, partners, agents and volunteers are to be covered as additional insureds under a "completed operations" type of additional insured endorsement with respect to general liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations. The endorsement(s) effectuating the foregoing additional insured coverage shall be ISO form CG 20 10 11 85, or CG 20 10 10 01 issued concurrently with CG 20 37 10 01, or their equivalent as long as it provides additional insured coverage, without limitation, for completed operations; (ii) automobile liability arising out of vehicles owned, leased, hired, or borrowed by or on behalf of the Contractor; (iii) any insurance written on a claims made basis, shall have a retroactive date that coincides with, or precede, the commencement of any work under this contract. Evidence of such coverage shall be maintained for a minimum of six (6) years beyond the expiration of the project.
2. King County will not accept Certificates of Insurance Alone. Improperly Completed Endorsements will be returned to your insured for correction by an authorized representative of the insurance company.
3. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the Owner, its officers, officials, agents, partners, employees, and volunteers. Any insurance or self-insurance maintained or expired by the Owner, its officers, officials, agents, partners, employees, volunteers, or shall be excess of the Contractor's insurance and shall not contribute with it. King County Housing Authority's Insurance is Non-Contributory in Claims Settlement Funding.
4. The "General description of agreement(s) and/or activity(s) insured" shall include reference to the activity and/or to either specific King County Housing Authority's; project of site name, contract number, lease number, permit number or construction approval number.
5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled or materially changed, except after thirty (30) days' [ten (10) days for non-payment of premium] prior written notice by certified mail, return receipt requested, has been given to the Owner.
6. Maintenance of the proper insurance for the duration of the contract is a material element of the contract. Material changes in the required coverage or cancellation of the coverage shall constitute a material breach of the contract.
7. Builders Risk / Course of Construction policies shall contain the following provisions:
 - a. The King County Housing Authority shall be named as loss payee.
 - b. The insurer shall waive all rights of subrogation against the Owner and the Property Manager, its officers, officials, employees and volunteers.

GENERAL CONDITIONS

2.6 ACCEPTABILITY OF INSURERS

- A. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-:VII. The name of the Insurance Company underwriting the coverage and its address shall be noted on the endorsement form. Contractors must provide written verification of their insurer's rating.

2.7 VERIFICATION OF COVERAGE

- A. Contractor shall furnish the Owner with original certificates and amendatory endorsements effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the Owner before work commences in sufficient time to permit contractor to remedy any deficiencies. The Owner reserves the right to require complete, certified copies of all required insurance policies or pertinent parts thereof, including endorsements affecting the coverage required by these specifications at any time.

2.8 SUBCONTRACTORS

- A. Subcontractors shall include the Contractor as additional insured under their policies. All coverage's for subcontractors shall be subject to all of the requirements stated herein. Contractor shall be responsible for the adequacy of required coverages for subcontractors, and compile related certificates of insurance and endorsements evidencing subcontractors' compliance.

2.9 PAYMENT AND PERFORMANCE BONDS

- A. Payment and performance bonds for 100% of the Contract Award Amount shall be furnished for the Work, using the Payment Bond and Performance Bond form AIA – form A312. Change order increases of cumulative 15% increments require revisions to the bond to match the new Contract Sum.

PART 3 - PERFORMANCE

3.1 CONTRACTOR CONTROL AND SUPERVISION

- A. Contractor shall be solely responsible for, and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, and shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, and their employees and agents.
- B. Contractor shall enforce strict discipline and good order among Contractor's employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Owner may, by Notice, request Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.
- C. The Contractor shall perform on the site, and with its own organization, work equivalent to at least 12% of the total amount of work to be performed under the contract.
- D. Work Hours: The Contractor's allowable hours of operation shall be limited to those hours between 8:00 A.M. and 6:00 P.M. Monday to Friday excluding public holidays.

3.2 PERMITS, FEES, AND NOTICES

- A. Unless otherwise provided in the Contract Documents, Contractor shall pay for and obtain all permits, licenses, and coordinate inspections necessary for proper execution and completion of the Work. Prior to final payment, the approved, signed permits shall be delivered to Owner.

3.3 PREVAILING WAGES

- A. Statutes of the State of Washington RCW 39.12 as amended shall apply to this contract. Requirements, in brief, are stated below:

GENERAL CONDITIONS

1. There shall be paid each laborer or mechanic of the Contractor or sub-Contractor engaged in work on the project under this contract in the trade or occupation listed in the schedule of Wage Rates, as determined by the Department of Labor and Industries, not less than the hourly wage rate listed therein, regardless of any contractual relationship which may be alleged to exist between the Contractor and any sub-contractor and such laborers and mechanics.
2. The "prevailing rate or wage" contained in the wage determination include health and welfare fund contributions and other fringe benefits collectively bargained for by the various management and labor organizations. Prevailing wages shall be paid based on the most recent semi-annual list as required by the Department of Labor and Industries (L&I).
3. In case any dispute arises as to what are the prevailing rates for wages of work of a similar nature, and such disputes cannot be resolved by the parties involved, including labor and management representatives, the matter shall be referred for arbitration to the Director of the Department of Labor and Industries of the State of Washington, and the Director's decision shall be final and conclusive and binding on all parties involved in the dispute.

B. Before commencing the Work, Contractor shall file a statement of "Intent to Pay Prevailing Wages."

C. After completion of the Work, Contractor shall file an "Affidavit of Wages Paid."

3.4 EQUAL EMPLOYMENT OPPORTUNITY

A. During performance of the Work:

1. Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, marital status, the presence of any physical, sensory, or mental disability, sexual orientation, Vietnam-era veteran status, disabled veteran status or political affiliation, nor commit any unfair practices as defined in RCW 49.60.
2. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, of any physical, sensory, or mental disability, sexual orientation, Vietnam-era veteran status, disabled veteran status, or political affiliation.
3. The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and orders in regard to Equal Employment Opportunity including but not limited to Executive Order 11246, as amended, Section 503 of the Rehabilitation Act of 1973, as amended, and the rules, regulations, and orders of the Secretary of Labor. The Contractor shall include the terms of this Clause in every subcontract so that such term shall be binding on each Subcontractor.
4. Non-Discrimination R.C.W. 49.60: These special requirements establish minimum requirements for affirmative action and are intended to define and implement the basic discrimination provisions of these specifications. Failure to comply with these requirements may constitute grounds for application of contract default.

3.5 SAFETY PRECAUTIONS

A. In performing this contract, the Contractor shall provide for protecting the lives and health of employees and other persons; preventing damage to property, materials, supplies, and equipment; and avoid work interruptions. For these purposes, the Contractor shall:

1. Follow Washington Industrial Safety and Health Act (WISHA) regional directives and provide a site-specific safety program that will require an accident prevention and hazard analysis plan for the contractor and each subcontractor on the work site. The Contractor shall submit a site-specific safety plan to the Owner's representative prior to the initial scheduled construction meeting.
2. Provide adequate safety devices and measures including, but not limited to, the appropriate safety literature, notice, training, permits, placement and use of barricades, signs, signal lights, ladders, scaffolding, staging, runways, hoist, construction elevators, shoring, temporary lighting, grounded outlets, wiring, hazardous materials, vehicles, construction processes, and equipment required by Chapter 19.27 RCW, State Building Code (Uniform Building, Electrical, Mechanical, Fire, and Plumbing Codes); Chapter 212-12 WAC, Fire Marshal Standards, Chapter 49.17 RCW, WISHA; Chapter 296-155 WAC, Safety Standards for Construction Work; Chapter 296-65 WAC; WISHA Asbestos Standard; WAC 296-62-071, Respirator Standard; WAC 296-62, General Occupation Health Standards, WAC 296-24, General Safety and Health Standards, WAC 296-24, General Safety and Health Standards, Chapter 49.70 RCW, and Right to Know Act.

GENERAL CONDITIONS

3. Comply with the State Environmental Policy Act (SEPA), Clean Air Act, Shoreline Management Act, and other applicable federal, state, and local statutes and regulations dealing with the prevention of environmental pollution and the preservation of public natural resources.
 4. Post all permits, notices, and/or approvals in a conspicuous location at the construction site.
 5. Provide any additional measures that the Owner determines to be reasonable and necessary for ensuring a safe environment in areas open to the public. Nothing in this part shall be construed as imposing a duty upon the Owner to prescribe safety conditions relating to employees, public, or agents of the Contractors.
- B. Contractor to maintain safety records: Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report any such incident to Owner. Owner shall, at all times, have a right of access to all records of exposure.
- C. Contractor to provide HazMat training: Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.
1. Information. At a minimum, Contractor shall inform persons working on the Project site of:
 - a. WAC: The requirements of chapter 296-62 WAC, General Occupational Health Standards;
 - b. Presence of hazardous chemicals: Any operations in their work area where hazardous chemicals are present; and
 - c. Hazard communications program: The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and material safety data sheets required by chapter 296-62 WAC.
 2. Training. At a minimum, Contractor shall provide training for persons working on the Project site which includes:
 - a. Detecting hazardous chemicals: Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
 - b. Hazards of chemicals: The physical and health hazards of the chemicals in the work area;
 - c. Protection from hazards: The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
 - d. Hazard communications program: The details of the hazard communications program developed by Contractor, or its Subcontractors, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.
- D. Hazardous, toxic or harmful substances: Contractor's responsibility for hazardous, toxic, or harmful substances shall include the following duties:
1. Illegal use of dangerous substances: Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site, any substances now or hereafter designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or harmful by any federal, state or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances"), in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored on the Project site.
 2. Contractor notifications of spills, failures, inspections, and fines: Contractor shall promptly notify Owner of all spills or releases of any hazardous substances which are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.

GENERAL CONDITIONS

- E. Public safety and traffic: All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.
- F. Contractor to act in an emergency: In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall so act if so authorized or instructed.
- G. No duty of safety by Owner: Nothing provided in this section shall be construed as imposing any duty upon Owner with regard to, or as constituting any express or implied assumption of control or responsibility over, Project site safety, or over any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public.

3.6 INDEPENDENT CONTRACTOR

- A. The Contractor and Owner agree the Contractor is an independent contractor with respect to the services provided pursuant to this Contract. Nothing in this Contract shall be considered to create a relationship of employer and employee between the parties hereto. Neither the Contractor nor any employee of the Contractor shall be entitled to any benefits accorded Owner employees by virtue of the services provided under this Contract. The Owner shall not be responsible for withholding or otherwise deducting federal income tax or social security or contributing to the State Industrial Insurance Program, or otherwise assuming the duties of an employer with respect to the Contractor, or any employees of the Contractor.

3.7 OPERATIONS, MATERIAL HANDLING, AND STORAGE AREAS

- A. Contractor shall confine all operations, including storage of materials, to Owner-approved areas.
- B. Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site.
- C. Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Final Acceptance, and shall repair or replace without cost to Owner any damage or loss that may occur.

3.8 PRIOR NOTICE OF EXCAVATION

- A. Prior to any excavation Contractor shall engage a locate service for all underground facilities or utilities. Contractor shall pay all fees for locator services and pay for all damages caused by excavation.

3.9 UNFORESEEN PHYSICAL CONDITIONS

- A. Notice requirement for concealed or unknown conditions: If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly and in no event later than seven Days after the first observance of the conditions. Conditions shall not be disturbed prior to such notice.
- B. Adjustment in Contract Time and Contract Sum: If such conditions differ materially and cause a change in Contractor's cost of, or time required for, performance of any part of the Work, the Contractor may be entitled to an equitable adjustment in the Contract Time or Contract Sum, or both, provided it makes a request therefore as provided in Part 5.

GENERAL CONDITIONS

3.10 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, VEGETATION, UTILITIES, AND IMPROVEMENTS

- A. Contractor shall protect from damage all existing conditions, including soils, structures, equipment, improvements, utilities, and vegetation at or near the Project site; and on adjacent property of a third party, the locations of which are made known to or should be known by Contractor. Contractor shall repair any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents, any defects of equipment, material, workmanship or design furnished by the Contractor, or failure by Contractor or subcontractor at any tier to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage promptly, Owner may have the necessary work performed and charge the cost to Contractor.
- B. New work which connects to existing work shall correspond in all respects with that to which it connects and/or be similar to existing work unless otherwise required by the Specifications.

3.11 MATERIAL AND EQUIPMENT

- A. All equipment, material, and articles incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in the Contract Documents. References in the Specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard quality and shall not be construed as limiting competition. Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of Owner, is equal to that named in the Specifications, unless otherwise specifically provided in the Contract Documents.
- B. Substitutions shall be considered where qualities and attributes including, but not limited to, cost, performance, weight, size, durability, visual effect, and specific features and requirements indicated are deemed equal or better by the Owner at the Owner's sole discretion. All requests for substitutions shall be made in writing to Owner and shall not be deemed to be approved unless approved in writing by Owner.

3.12 CORRECTION OF NONCONFORMING WORK

- A. Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Final Acceptance.
- B. If Contractor fails to correct nonconforming Work, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.

3.13 CLEAN UP

- A. Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor.

3.14 SUBCONTRACTORS AND SUPPLIERS

- A. Contractor shall utilize Subcontractors and suppliers which are experienced and qualified.
- B. By appropriate written agreement, Contractor shall require each Subcontractor to be bound to Contractor by terms of those Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.

GENERAL CONDITIONS

- C. Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.
- D. It is the Contractor's responsibility to pay its Subcontractors and material suppliers on a timely basis. The Owner reserves the right to withhold a portion of the Contractor's payment if the Contractor fails to make timely payments to the Subcontractors and material suppliers.
- E. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Owner and any Subcontractor; or any persons other than Owner and Contractor.
- F. The Contractor shall not enter into any subcontract with any subcontractor who has been suspended or debarred from participating in contracting programs by any agency of the United States Government or by any state, territory, or municipality.

3.15 INDEMNIFICATION

- A. The Contractor hereby agrees to indemnify, defend, and hold harmless the Authority, its successors and assigns, director, officers, officials, employees, agents, partners and volunteers (all foregoing singly and collectively (Indemnities")) from a and against any and all claims, losses, harm costs, liabilities, damages and expenses, including, but not limited to, reasonable attorney's fees arising or resulting from the performance of the services, or the acts or omissions of the Contractor its successors, and assigns, employees, subcontractors or anyone acting on the contractor's behalf in connection with this Contract or its performance of this Contract.
- B. Provided, however, that the Contractor will not be required to indemnify, defend, or save harmless the indemnitee as provided in the preceding paragraphs of this section if the claim, suit, or action for injuries, death, or damages is caused by the sole negligence of the indemnitee. Where such claims, suites, or actions result from the concurrent negligence of (a) the indemnitee or the indemnitee's agents or employees and (b) the Contractor or the Contractor's agent or employee, the indemnity provisions provided in the preceding paragraphs of this section shall be valid and enforceable only to the extent of the Contractor's negligence or the negligence of its agents and employees..
- C. The foregoing indemnity is specifically and expressly intended to constitute a waiver of the Contractor's immunity under Washington's Industrial Insurance act, RCW Title 51. The parties acknowledge that these provisions were specifically negotiated and agreed upon by them. If any portion of this indemnity clause is invalid or unenforceable, it shall be deemed excised and the remaining portions of the clause shall be given full force and effect.
- D. The Contractor hereby agrees to require all its Subcontractors or anyone acting under its direction or control or on its behalf in connection with or incidental to the performance of this Contract to execute an indemnity clause identical to the preceding clause, specifically naming the Owner as indemnity, and failure to do so shall constitute a material breach of this Contract by the Contractor.

3.16 PROHIBITION AGAINST LIENS

- A. The Contractor is prohibited from placing a lien on the Owner's property. This prohibition shall apply to all subcontractors of any tier and all materials suppliers, in accordance with RCW 35.82.190.

3.17 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION

- A. Liquidated Damages
 - 1. Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence. The liquidated damage amounts set forth will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from any payments to the Contractor.

GENERAL CONDITIONS

2. If different completion dates are specified in the contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed.

3.18 WAIVER AND SEVERABILITY

- A. The failure or delay of either party to insist on performance of any provision of the Contract, or to exercise any right or remedy available under the Contract, shall not be construed as a waiver of that provision, right, or remedy in any later instance. Waiver or breach of any provision of the Contract shall not be construed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the terms of the Contract, unless the Contract is modified pursuant to the Clause entitled "Contract Modifications" herein.
- B. If any provision of the Contract is or becomes void or unenforceable by operation of law, the remaining provisions shall be valid and enforceable.

PART 4 - PAYMENTS AND COMPLETION

4.1 CONTRACT SUM

- A. The Contract Sum shall include all taxes imposed by law and properly chargeable to the Project, including sales tax. The Contractor shall pay the WSST to the Department of Revenue and shall furnish proof of payment to the Owner if requested.
- B. The retail sales tax does not apply to the gross contract price.
- C. Prime and subcontractors are required to pay retail sales tax upon all purchases of materials, including prefabricated and precast items, equipment, leases or rentals of tools, consumables, and other tangible personal property which is installed, applied, attached, or otherwise incorporated in their work.

4.2 APPLICATION FOR PAYMENT

- A. At monthly intervals, unless determined otherwise by Owner, Contractor shall submit to Owner an Application for Payment for Work completed in accordance with the Contract Documents. Each application shall be supported by such substantiating data as Owner may require.
- B. Each invoice shall include the following statement: "I hereby certify that the items listed are proper charges for materials, merchandise or services provided to the King County Housing Authority, and that all goods and/or services have been provided; that prevailing wages have been paid in accordance with the approved statements of intent filed with the Department of Labor and Industries; and that sub-contractors and/or suppliers have been paid, less earned retainage, as their interest appears in the last payment received."
- C. Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule. Each Application for Payment shall be consistent with previous applications and payments.
- D. Owner shall retain 5% of the amount of each progress payment until 45 Days after Final Acceptance and receipt of all documents required by law or the Contract Documents, including releases by Washington State Employment Security Department and Washington State Department of Revenue, Department of Labor & Industries, and consent of surety to release of the retainage.
- E. Waivers of Lien: With each Application for Payment, submit conditional waivers lien from every entity who is lawfully entitled to file a lien arising out of the Contract and related to the Work covered by the payment.
 1. Submit partial waivers on each item for amount requested, before deduction for retainage, on each item.
 2. When an application shows completion of an item, submit final or full waivers.
 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - a. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.

GENERAL CONDITIONS

- F. Final Payment Application: Submit final Application for Payment with releases and close out supporting documentation.
- G. Approved payments shall be mailed to the Contractor within 30 days.

4.3 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT

- A. The Owner shall make a final inspection of the Work on receipt of (1) written notice from the Contractor that the Work is ready for final inspection and (2) a final Application for Payment. When the Owner finds the Work acceptable and fully performed under the Contract Documents, and the Contractor has delivered to the Owner all warranties, permits, and operations manuals, the Owner will issue a Notice of Final Completion.
- B. Acceptance of final payment by Contractor, or any Subcontractor, shall constitute a waiver and release to Owner of all claims by Contractor, or any such Subcontractor, for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in PART 7 - .

PART 5 - CHANGES

5.1 CHANGE IN THE WORK

- A. Owner may, at any time and without notice to Contractor's surety, order additions, deletions, revisions, or other changes in the Work. These changes in the Work shall be incorporated into the Contract Documents through the execution of Change Orders. If any change in the Work ordered by Owner causes an increase or decrease in the Contract Sum or the Contract Time, an equitable adjustment shall be made as provided in 5.2 and 5.3.
- B. Pending agreement on the terms of the Change Order, Owner may direct Contractor to proceed immediately with the Change Order Work. Contractor shall not proceed with any change in the Work until it has obtained Owner's approval.
- C. The Contractor agrees that any change in the Contract Amount or Contract Time provided in a Change Order is full and complete compensation to the Contractor for the change(s) to the work, deleted work, modified work, direct or indirect impact on the Contractor's schedule, and for any equitable adjustment or time extension to which the Contractor may be entitled to in this Change Order, pursuant to the Contract between the Owner and Contractor.

5.2 CHANGE IN THE CONTRACT SUM

- A. Change Order Pricing - Fixed Price: When the fixed price or time and materials method is used to determine the value of any Work covered by a Change Order, or of a request for an equitable adjustment in the Contract Sum, the following procedures shall apply:
 - 1. Contractor's Change Order proposal, or request for adjustment in the Contract Sum, shall be accompanied by a complete itemization of the costs, including labor, material, subcontractor costs, and overhead and profit. The costs shall be itemized in the manner set forth below, and shall be submitted on breakdown sheets with documentation in a form approved by Owner.
 - 2. Any request for adjustment of Contract Sum shall include only the following items:
 - a. Craft labor costs for Contractors and Subcontractors.
 - 1) Basic wages and benefits: Hourly rates and benefits according to applicable prevailing wages.
 - 2) Direct supervision shall not to exceed 15% of the cost of direct labor. No supervision markup shall be allowed for a working supervisor's hours.
 - 3) Worker's Insurance. Direct contributions to the State for industrial insurance, medical aid, and supplemental pension by the class and rates established by L&I.
 - 4) Federal Insurance. Direct contributions required by the Federal Insurance Compensation Act; Federal Unemployment Tax Act; and the State Unemployment Compensation Act.
 - 5) Safety and small tools: 4% of the sum of the amounts calculated in (1), (2), and (3) above.

GENERAL CONDITIONS

- b. Material Costs: Material costs and applicable sales tax shall be developed from actual known costs, supplier quotations or standard industry pricing guides and shall consider all available discounts. Freight costs, express charges, or special delivery charges shall be itemized.
- c. Equipment Costs: Itemization of the type of equipment and the estimated or actual length of time the equipment appropriate for the Work is or will be used on the change in the Work. Costs will be allowed for equipment and applicable sales tax only if used solely for the changed Work, or for additional rental costs actually incurred by the Contractor. The Date Quest Rental Rate (Blue Book) shall be used as a basis for establishing rental rates of equipment not listed in the above sources. The maximum rate for standby equipment shall not exceed 50% of the applicable rate.
- d. Allowance for Overhead: This allowance shall compensate Contractor for all noncraft labor, temporary construction facilities, field engineering, schedule updating, as-built drawings, home office cost, B&O taxes, office engineering, estimating costs, additional overhead because of extended time and any other cost incidental to the change in the Work. This allowance shall be strictly limited in all cases an amount not to exceed the following:
 - 1) For Contractor, for any Work actually performed by Contractor's own forces, 16% of the cost.
 - 2) For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 16% of the cost.
 - 3) For Contractor, for any Work performed by its Subcontractor(s), 6% of the amount due each Subcontractor.
 - 4) For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 5% of the amount due the sub-Subcontractor.
- e. Allowance for Profit:
 - 1) For Contractor or Subcontractor of any tier for work performed by their forces, 5% of the cost developed in accordance with subsections a, b & c above.
 - 2) For Contractor or Subcontractor of any tier for work performed by a subcontractor of a lower tier, 5% of the Subcontractor cost.
- f. Insurance or Bond Premium: The costs of any change or additional premium of Contractor's liability insurance and public works bond arising directly from the changed Work. The costs of any change in insurance or bond premium shall be added after overhead and profit are calculated.

B. Change Order Pricing - Unit Prices

- 1. Work on a unit-price basis as stated in the Specifications and at the price submitted in the Bid Form or as subsequently modified.
 - a. Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead and profit, and bond and insurance costs; and
 - b. Quantities must be supported by field measurement verified by Owner.

5.3 CHANGE IN THE CONTRACT TIME

- A. The Contract Time shall only be changed by a Change Order. Contractor shall immediately notify Owner, and shall include any request for a change in the Contract Time in its Change Order proposal.
- B. If the time of Contractor's performance is changed due to an act of Force Majeure, Contractor shall request for an equitable adjustment in the Contract Time in writing within 24-hours of the occurrence.

PART 6 - CLAIMS AND DISPUTE RESOLUTION

6.1 CLAIMS PROCEDURE

- A. If the parties fail to reach agreement regarding any dispute arising from the Contract Documents, Contractor's only remedy shall be to file a Claim with Owner within 30 Days from Owner's final offer.

GENERAL CONDITIONS

- B. The Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor may be entitled. It shall be fully substantiated and documented.
- C. After Contractor has submitted a fully-documented Claim, Owner shall respond, in writing, to Contractor with a decision within 30 Days from the date the Claim is received.
- D. Contractor shall proceed with performance of the Work pending final resolution of any Claim. Owner's written decision as set forth above shall be final and conclusive as to all matters set forth in the Claim.
- E. Any Claim of the Contractor against the Owner for damages, additional compensation, or additional time, shall be conclusively deemed to have been waived by the Contractor unless timely made in accordance with the requirements of this section.

6.2 ARBITRATION

- A. If Contractor disagrees with Owner's decision rendered in accordance with paragraph 6.1C, Contractor shall provide Owner with a written demand for arbitration. No demand for arbitration of any such Claim shall be made later than 30 Days after the date of Owner's decision on such Claim; failure to demand arbitration within said 30 Day period shall result in Owner's decision being final and binding upon Contractor and its Subcontractors.
 - 1. Notice of the demand for arbitration shall be filed with the American Arbitration Association (AAA), with a copy provided to Owner. The parties shall negotiate or mediate under the Voluntary Construction Mediation Rules of the AAA, or mutually acceptable service.
- B. All Claims arising out of the Work shall be resolved by arbitration. The judgment upon the arbitration award may be entered, or review of the award may occur, in the superior court having jurisdiction thereof. No independent legal action relating to or arising from the Work shall be maintained.

6.3 CLAIMS AUDITS

- A. All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Contractor, or Subcontractors of any tier, to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim or to permit Owner access to the books and records of Contractor, or Subcontractors of any tier, shall constitute a waiver of the Claim and shall bar any recovery.
 - 1. In support of Owner audit of any Claim, Contractor shall promptly make available to Owner all records relating to the Work.

PART 7 - TERMINATION OF THE WORK

7.1 TERMINATION BY OWNER FOR CAUSE

- A. Owner may, upon a written Notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for cause upon the occurrence of any one or more of the following events:
 - 1. Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Completion of the Work within the Contract Time;
 - 2. Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency;
 - 3. Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents;
 - 4. Contractor repeatedly fails to supply skilled workers or proper materials or equipment;
 - 5. Contractor repeatedly fails to make prompt payment due to Subcontractors, suppliers, or for labor;
 - 6. Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction; or
 - 7. Contractor is otherwise in material breach of any provision of the Contract Documents.

GENERAL CONDITIONS

- B. Upon termination, Owner may at its option:
 - 1. Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of, and to finish, the Work;
 - 2. Finish the Work by whatever other reasonable method it deems expedient.
- C. Owner's rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.
- D. When Owner terminates the Work in accordance with this section, Contractor shall take the actions set forth in paragraph 7.2B, and shall not be entitled to receive further payment until the Work is accepted.
- E. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of Contractor's actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. Contractor shall also be liable for liquidated damages until such reasonable time as may be required for Completion. These obligations for payment shall survive termination.
- F. Termination of the Work in accordance with this section shall not relieve Contractor or its surety of any responsibilities for Work performed.
- G. If Owner terminates Contractor for cause, and it is later determined that none of the circumstances set forth in 7.1A exist, then such termination shall be deemed a termination for convenience pursuant to 7.2.

7.2 TERMINATION BY OWNER FOR CONVENIENCE

- A. Owner may, upon Notice, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for the convenience of Owner.
- B. Unless Owner directs otherwise, after receipt of a Notice of termination for either cause or convenience, Contractor shall promptly:
 - 1. Stop performing Work on the date and as specified in the notice of termination;
 - 2. Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated;
 - 3. Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated;

PART 8 - MISCELLANEOUS PROVISIONS

8.1 RECORDS KEEPING AND REPORTING

- A. The Contractor and all Subcontractors shall maintain accounts and records in accordance with State Auditor's procedures, including personnel, property, financial and programmatic records which sufficiently and properly reflect all direct and indirect costs of any nature expended and services performed in the performance of this Contract and other such records as may be deemed necessary by the Owner to ensure proper accounting for all funds contributed by the Owner to the performance of this Contract and compliance with this Contract.
- B. The Contractor, and its Subcontractors, shall maintain these records for a period of six (6) years after the date of Final Acceptance.

8.2 AUDITS AND INSPECTIONS

- A. The records and documents with respect to all matters covered by this Contract shall be subject at all times to inspection, review or audit by the Owner or any other government agency so authorized by law during the performance of this Contract. The Owner shall have the right to an annual audit of the Contractor's financial statement and condition.

GENERAL CONDITIONS

8.3 ORGANIZATION CONFLICTS OF INTEREST

- A. The Contractor warrants that to the best of its knowledge and belief and except as otherwise disclosed, it does not have any organizational conflict of interest which is defined as a situation in which the nature of work under this Contract and the Contractor's organizational, financial, contractual or other interests are such that:
 - 1. Award of the Contract may result in an unfair competitive advantage; or
 - 2. The Contractor's objectivity in performing the Contract work may be impaired.
- B. The Contractor agrees that if after award they discover an organizational conflict of interest with respect to this Contract, they shall make an immediate and full disclosure in writing to the Contracting Officer, which shall include a description of the action, which the Contractor has taken or intends to take to eliminate or neutralize the conflict. The Owner may, however, terminate the Contract if it deems the action to be in the best interest of the Owner.
- C. In the event the Contractor was aware of an organizational conflict of interest before the award of this Contract and intentionally did not disclose the conflict to the Contracting Officer, the Owner may terminate the Contract for default.
- D. The provisions of this Clause shall be included in all subcontracts and consulting agreements wherein the work to be performed is similar to the services provided by the Contractor. The Contractor shall include in such subcontracts and consulting agreements any necessary provisions to eliminate or neutralize conflicts of interest.

8.4 INTERESTS OF MEMBERS OF CONGRESS

- A. No member of or delegate to the Congress of the United States of America shall be admitted to any share or part of this Contract or to any benefit to arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.

8.5 INTERESTS OF MEMBERS, OFFICERS, COMMISSIONERS AND EMPLOYEES, OR FORMER MEMBERS, OFFICERS AND EMPLOYEES

- A. No member, officer, or employee of the King County Housing Authority, no member of the governing body of the locality in which the project is situated, no member of the governing body in which the Owner was activated, and no other public official or such locality or localities who exercises any functions or responsibilities with respect to the project, shall, during his or her tenure, or for one year thereafter, have any interest, direct or indirect, in this Contract or the proceeds thereof.

BID FORM

PROJECT NAME AND LOCATION:

**Fire Alarm System Upgrade
Meadowbrook Apartments**

Contract Number: DW2302831

BID FORM

The undersigned, Legal Name of Bidder: _____

on this date: _____, 2023, having familiarized him/herself with the contract documents, site conditions, and has field verified all measurements contained in the project manual as prepared by the Owner, hereby proposes to furnish labor, materials and necessary equipment – all including, but not limited to, demolition, disposal, new installation and the required applicable taxes and fees to complete the work for the following bid amounts:

BASE BID

1410-29 _____ (\$ _____)
(Including sales tax indicated in Instructions to Bidders)

ADD/ALTERNATE See Specification Section 01100, 1.1 B2 a-c

Alternate Pricing _____ (\$ _____)
(Including sales tax indicated in Instructions to Bidders)

ADDENDA _____
Acknowledge receipt of any addenda by inserting the number(s) above

In submitting this bid, it is understood that the right is reserved by the Owner to reject any and all bids. The undersigned hereby agrees that this proposal shall be a valid and firm offer for a period of Sixty (60) calendar days from the date of Bid Opening.

Bidder agrees that Work will be substantially complete and ready for final payment in accordance with the Contract Documents on or before the date, within the number of calendar days indicated.

The undersigned Bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date for this Project, the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify (or declare) under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Signature of Bidder

Print Your Name

Submitted on _____ day of _____ 2023

City

State

BIDDER INFORMATION

BIDDER INFORMATION

Name of Bidder (Company): _____

Address: _____

Contact Name: _____

Phone Number: _____ Email Address: _____

Business Type: General Contractor () Other () (Please specify): _____

Bidder is a(n): Individual Partnership Joint Venture Incorporated in the state of _____

List business names & associated UBI # used by Bidder during the past 5 years if different than above:

Bidder has been in business continuously from: _____
Month, Year

Business License #: _____ Federal ID #: _____

Current UBI #: _____ Dept. of L&I Worker's Comp. Acct. #: _____

Bidder has experience in work "Similar in Scope and Complexity" comparable to that required for this Project:

As a prime contractor for _____ years. As a subcontractor for _____ years.

OWNER(S) OF COMPANY (List all owners):	OWNER'S SOCIAL SECURITY NUMBER (only required if sole proprietorship):

No. of regular full-time employees other than owner(s): _____

Indicate clearly the kind of work your company will actually perform in this project:

Approximate % of work your company will actually perform: _____

List the supervisory personnel to be employed by the Bidder and available for, and intended to, work on this project:

<u>Name</u>	<u>Title</u>	<u>How Long With Bidder</u>
_____	_____	_____
_____	_____	_____

BIDDER INFORMATION

SUBCONTRACTORS

Do you intend to use Subcontractor(s) in this project? Yes No (If yes, you must show the name of the subcontractors. Attach additional pages as necessary.)

Subcontractors Name	Subcontractor's UBI#	Phone Number	Trade	Years in Business
1.				
2.				
3.				
4.				
5.				

BIDDER'S EXPERIENCE

Projects successfully supervised and completed by your company for work of similar scope and value as specified in bid documents in the last 5 years. Attach additional pages as necessary.

Name of Project	Completion Date	Duration (Months)	Nature of Work	Amount of Contract
1.				
2.				
3.				
4.				
5.				

Owner's Name (of project listed above)	Project Address	Contact Person	Phone Number
1.			
2.			
3.			
4.			
5.			

Has Bidder ever been found guilty of violating any State or Federal employment laws? No Yes
If yes, give details & attach additional pages as necessary:

Has Bidder ever filed for protection under any provision of the federal bankruptcy laws or state insolvency laws?
 No Yes If yes, give details & attach additional pages as necessary:

CONTRACT FORM

This Contract is entered into by and between the King County Housing Authority, hereinafter referred to as the "Owner" whose principal office is located at 600 Andover Park West, Seattle, WA 98188 and [Name of Contractor], referred to as the "Contractor", whose principal office is located at [Contractor's Address].

IN CONSIDERATION OF the mutual benefits and conditions hereinafter contained, the parties hereto agree as follows:

1.1 Contract Documents

A. The provisions set forth in the Contract Documents are hereby incorporated into and made part of the Contract. Contractor acknowledges receipt and review of all Contract Documents applicable to performance of the work. The Contract shall consist of the following component parts:

1. This Instrument
2. Addenda
3. Specifications
4. Plans
5. Bid Form
6. Pre-Bid Agenda
7. General Conditions
8. Instructions to Bidders
9. Prevailing Wage Rates
10. Performance and Payment Bonds
11. Asbestos Report

1.2 Scope of Services to be Performed by the Contractor: The Contractor shall provide all labor, materials, tools, equipment, transportation, supplies, and incidentals required to complete the work in accordance with the Contract Documents for:

Project: Meadowbrook Fire Alarm System Upgrade

Contract No.: DW2302831

1.3 Compensation: The total amount of the Contract shall be [\$\$\$] dollars and [¢¢] cents (\$[###.##]) subject to additions and deductions provided therein.

1.4 Duration of Contract: The Contractor shall commence work after receipt of Notice to Proceed, follow the schedule specified in the contract documents, and all work must be completed within [Contract Duration] ([##]) consecutive calendar days from the date of the Notice to Proceed unless sooner terminated pursuant to the General Conditions. Upon expiration of the original Contract term, the Contract, at the Owner's sole discretion, may be extended for a period determined by the Owner.

1.5 Liquidated Damages: Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence. If Completion of the Work does not occur within the Contract Time, the Contractor agrees that Liquidated Damages in the amount of **\$250.00** per day will be assessed for each calendar day that the Contractor exceeds the time for completion.

The individuals signing this Contract warrant and represent for themselves and for their respective organizations that they are duly authorized to sign this Contract and that upon such signing their respective organizations are bound thereby.

DATED this _____ day of _____, 2023

Contractor

Owner

President/Owner

Dan Watson
Advisor to the Executive Director
KING COUNTY HOUSING AUTHORITY

CERTIFICATE OF INSURANCE

DATE(MM/DD/YY)

Issue Date

PRODUCER Vendor's Insurance Agent Street Address City, State, Zip Phone Number	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. <p style="text-align: center;">COMPANIES AFFORDING COVERAGE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;">COMPANY A</td> <td>ABC Insurance Company</td> </tr> <tr> <td style="text-align: center;">COMPANY B</td> <td>DEF Insurance Company</td> </tr> <tr> <td style="text-align: center;">COMPANY C</td> <td>GHI Insurance Company</td> </tr> <tr> <td style="text-align: center;">COMPANY D</td> <td></td> </tr> </table>	COMPANY A	ABC Insurance Company	COMPANY B	DEF Insurance Company	COMPANY C	GHI Insurance Company	COMPANY D	
COMPANY A	ABC Insurance Company								
COMPANY B	DEF Insurance Company								
COMPANY C	GHI Insurance Company								
COMPANY D									

INSURED Vendor Name Street Address City, State, Zip	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;">COMPANY B</td> <td>DEF Insurance Company</td> </tr> <tr> <td style="text-align: center;">COMPANY C</td> <td>GHI Insurance Company</td> </tr> <tr> <td style="text-align: center;">COMPANY D</td> <td></td> </tr> </table>	COMPANY B	DEF Insurance Company	COMPANY C	GHI Insurance Company	COMPANY D	
COMPANY B	DEF Insurance Company						
COMPANY C	GHI Insurance Company						
COMPANY D							

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	GENERAL LIABILITY	XXX123	01/01/00	01/01/01	GENERAL AGGREGATE	2,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY				PRODUCTS-COMP/OP AGG	1,000,000
	<input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR				PERSONAL & ADV INJURY	1,000,000
	<input type="checkbox"/> OWNER'S & CONTRACTOR'S PROT				EACH OCCURRENCE	1,000,000
					FIRE DAMAGE (Any one fire)	50,000
					MED EXP (Any one person)	5,000
B	AUTOMOBILE LIABILITY	XXX456	01/01/00	01/01/01	COMBINED SINGLE LIMIT	1,000,000
	<input checked="" type="checkbox"/> ANY AUTO				BODILY INJURY (Per person)	
	<input type="checkbox"/> ALL OWNED AUTOS				BODILY INJURY (Per accident)	
	<input checked="" type="checkbox"/> HIRED AUTOS				PROPERTY DAMAGE	
<input type="checkbox"/> SCHEDULED AUTOS						
<input type="checkbox"/> NON-OWNED AUTOS						
	GARAGE LIABILITY				AUTO ONLY-EA ACCIDENT	
	<input type="checkbox"/> ANY AUTO				OTHER THAN AUTO ONLY:	
					EACH ACCIDENT	
					AGGREGATE	
	EXCESS LIABILITY				EACH OCCURRENCE	
	<input type="checkbox"/> UMBRELLA FORM				AGGREGATE	
	<input type="checkbox"/> OTHER THAN UMBRELLA FORM					
C	WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY	XXX789	01/01/00	01/01/01	<input checked="" type="checkbox"/> STATUTORY LIMITS	
	<input type="checkbox"/> THE PROPRIETOR/PARTNERS/EXECUTIVE OFFICERS ARE:				EACH ACCIDENT	1,000,000
	<input type="checkbox"/> INCL				DISEASE-POLICY LIMIT	1,000,000
	<input type="checkbox"/> EXCL				DISEASE-EACH EMPLOYEE	1,000,000
	OTHER					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

Security Properties Residential and King County Housing Authority are named as additional insureds with respect to above general liability and auto coverage. Re: Contract DW2302831 at Meadowbrook Apartments 1408 NW Richmond Beach, Shoreline, WA 98177.

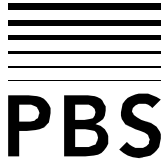
CERTIFICATE HOLDER Security Properties Residential King County Housing Authority 600 Andover Park West Seattle, WA 98188-3326	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE Signature of Insured's Agent
ACORD 25-S (3/93)	ACORD CORPORATION 1993

PROVIDE

**GENERAL LIABILITY
ENDORSEMENT**

and

**AUTO LIABILITY
ENDORSEMENT**



Engineering +
Environmental

LIMITED ASBESTOS SURVEY REPORT

MEADOWBROOK APARTMENTS

1404, 1406, 1408 and 1410 NW Richmond Beach Drive
Shoreline, Washington

Prepared for:

Deborah McCaslin
King County Housing Authority
625 Andover Park West
Tukwila, WA 98188

November 2011
PBS Project # 40573.064

Bend | Boise | Coquille | Eugene | Portland | Seattle | Tri-Cities | Vancouver

2517 Eastlake Avenue East, Suite 100, Seattle, WA 98102
206.233.9639 Main
206.762.4780 Fax
www.pbsenv.com

MEADOWBROOK APARTMENTS
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October 2011

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TAB 1
Executive Summary

Background

PBS Engineering + Environmental (PBS) performed a limited inspection of the Meadowbrook Apartments located at 1404, 1406, 1408 and 1410 NW Richmond Beach Road in Shoreline, Washington, to determine the presence of asbestos-containing materials (ACMs) prior to purchase. The buildings have been designated here-on as Building A (1410), Building B (1408), Building C (1406) and Building D (1404). PBS inspected selected units and common areas in all buildings, including the roofs. Building A included units A-3, A-8, A-15, A-17, A-24 and A-25; Building B included units B-1, B-8, B-12, B-23, B-25 and B-27; Building C included units C-4, C-7, C-11, C-16, C-19, C-20 and C-27; and Building D included units D-3, D-5, D-8, D-23, D-26 and D-27. Units 1-9 are typically located on the first floor of each building; Units 10-19 are on the second floors and Units 20-29 are on the third floors.

Building Descriptions

The Meadowbrook Apartments consists of four buildings, of which Buildings A and B; and Buildings C and D are connected by breezeways. The manager's office is located in Building B with an adjacent swimming pool, pump room and storage for the swimming pool. The complex was constructed in 1967. The complex contains one, two and three-bedroom apartments with a total of 115 units. The three-story, wood-frame structures are built on concrete slab and have flat roofs with parapet walls. Interior finishes typically consist of textured gypsum wallboard, sprayed-on acoustical ceiling texture (popcorn), carpet over concrete or plywood, and sheet vinyl flooring (from one to five layers) in kitchens and bathrooms. Laundry rooms in each building have sheet vinyl flooring. The exteriors of the buildings are covered with stucco panels, wood siding and aluminum-frame windows.

All buildings have undergone improvements including replacement of windows, sliding glass doors, carpets, paint, appliances and hallway lighting. New roofing was installed over the original roofing in 2010.

Survey Process

Accessible areas of the buildings within the scope of work were inspected as part of this investigation. Inaccessible areas are defined as those requiring selective demolition, fall protection or confined-space entry protocols to gain access. Selective demolition of representative wall and ceiling assemblies to determine the presence and condition of any concealed ACMs was not included in the scope of this investigation.

Suspect asbestos materials were sampled by AHERA accredited inspector Harry Goren (Cert. # 110781 Exp. 2/23/12) and Janet Murphy (Cert. # 112302 Exp. 6/14/12) on October 17-31, 2011. Samples were assigned a unique identification number and delivered to Seattle Asbestos Test (SAT) for analysis. All samples were analyzed by polarized light microscopy (PLM), which has a reliable limit of quantification of one percent asbestos by volume. Attached is an inventory of all suspect asbestos-containing materials sampled by PBS and analyzed for asbestos content along with chain-of-custody forms and laboratory data sheets. One hundred and twenty-two (122) bulk samples were collected and delivered for analysis to SAT in Lynnwood, Washington using chain-of-custody protocol.

Findings**Asbestos-Containing Materials (ACM)**

The attached Asbestos Sample Inventory identifies all suspect materials that were sampled by

PBS and analyzed for asbestos. All buildings are considered to have homogeneous building materials, based on the similar 1967 construction and the absence of major historical renovations. The following materials were found to contain asbestos in concentrations greater than 1% as determined by PLM microscopy:

- Sprayed-on acoustical ceiling texture (popcorn) – Apartment units (Living rooms, dining rooms, bedrooms), Hallways, Storage Rooms, Laundry Rooms
- Texture on Gypsum Wallboard – on all walls in hallways, tenant units and ceilings in Kitchen and Bathrooms
- Texture Overspray on floors – under carpet and other flooring
- Texture Overspray in mechanical rooms in electrical panels on conduits and in mechanical equipment
- Fire Door Core – doors on roof at stairwell entrance
- Black Tar Roof Patches – All Roofs
- Silvercoat (friable) and Black Asphaltic Roofing with Hot Mop Bottom Layer – all Roofs
- Gray and Black Coating on Chimney Stacks – Roofs of Buildings C and D
- Brown Wood-Pattern Sheet Vinyl – Bldg A Unit 24 Foyer under carpet
- 12” Tan Vinyl Floor Tile with Speckles and Black Mastic – in closets under water heaters and Kitchens under stoves
- Sheet Vinyl (orange to brown in color) – Bldg C Laundry Room as 2nd layer under non-ACM sheet vinyl, Bldg A Maintenance Shop, in all Building’s first floor foyers in entry halls under carpet
- 12” White Vinyl Floor Tile with a Texture - Building D Laundry Room closet floor.
- Multiple layers of flooring tested positive in the following units - Bldg. A, Unit 17 Kitchen, Unit 15 Kitchen, Bldg. B, Unit 23 Bathroom, Unit 25 Kitchen, Bldg. C Unit 27 Bathroom, Unit 20 Kitchen, Bldg. D, Unit 3 Bathroom, Unit 24 Kitchen.

The following materials were found to contain no asbestos as determined by PLM microscopy:

- Light Gray Sealant – on vinyl window frames, reight frames door frames and sliding glass door frames
- Stucco – exterior of buildings
- Brown Paper – behind wood siding on exterior
- Fiberglass Insulation – in walls
- Green Pebble Pattern Sheet Vinyl – Building A Laundry Room, Building B Laundry Room
- White Sheet Vinyl With Gray Spots/Yellow Mastic- Elevators
- Pink Square Pattern Sheet Vinyl – Men’s and Women’s Locker Room/Restroom next to the Management Office
- 12” Tan Square Pattern Sheet Vinyl – Building D Laundry Room
- Yellow and Brown Carpet Mastic – Hall Foyers
- White Ceramic Tile/Caulk/Brown Mastic - Men’s Locker Room/Restroom next to the

Management Office

- Brown and White Covebase Mastic – in apartment units under rubber covebase
- Black Rubberized Roofing Material – on elevator risers on roof
- 3-Tab Shingles and Associated Black Paper – roofs at mansards and dog house
- Black Granular Roofing - installed over silver coat roofing (ACM) in raised strips
- Black Sealant - sheet metal parapet wall cap

While PBS has endeavored to identify or presumed the presence and type of ACMs in concealed locations, additional unidentified ACMs may exist. Suspect ACMs that may exist at inaccessible locations include moisture/vapor barrier felts or coatings within exterior wall cavities, caulking and/or sealants and possibly adhesives on various older finishes that may be concealed within newer construction. Flooring in any units not sampled as part of this survey is considered to be positive until tested.

Recommendations**Asbestos-Containing Materials (ACM)**

The ACMs identified should only be impacted by properly trained and protected personnel using appropriate work practices and engineering controls. A qualified asbestos abatement contractor licensed in the State of Washington should be employed to remove such ACMs according to applicable local, state and federal regulations.

Caution should be exercised during renovation/demolition, as concealed ACMs may exist in various unidentified locations. Demolition activities should be performed by personnel having received a minimum of the WISHA two-hour asbestos awareness training. Other work that may impact asbestos should be performed by personnel having received proper training and utilizing proper worker protection according to WISHA standards. Work impacting asbestos is subject to the requirements of various regulations, including, but not limited to: 40 CFR Part 61, NESHAPS; 40 CFR Part 763, AHERA; WAC 296-62 and 296-65; and Puget Sound Clean Air Agency Regulation III, Article 4, Asbestos.

Report prepared by:

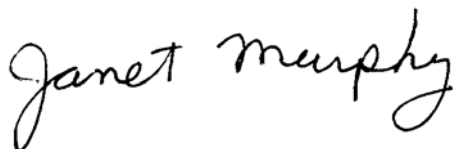


Harry Goren
AHERA Building Inspector
(Cert #110781 exp. 2/23/12)

Report reviewed by:



Brian Stanford
Senior Project Manager



Janet Murphy
AHERA Building Inspector
(Cert #112302 exp. 6/14/12)

TAB 2
Asbestos Bulk Sample Data

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.064 -01	Light gray sealant on vinyl window frames	Building A, West side	Layer 1: Light gray soft/elastic material	NAD	SAT
40573.064 -02	Light gray sealant on vinyl window frames	Building A, East side	Layer 1: Light gray soft/elastic material with paint	NAD	SAT
40573.064 -03	Light gray sealant on vinyl window frames	Building B, West side	Layer 1: Light gray soft/elastic material with paint	NAD	SAT
40573.064 -04	Light gray sealant on vinyl window frames	Building B, East side	Layer 1: Light gray soft/elastic material with paint	NAD	SAT
40573.064 -05	Light gray sealant on vinyl window frames	Building C, North side	Layer 1: Light gray soft/elastic material with paint	NAD	SAT
40573.064 -06	Light gray sealant on vinyl window frames	Building C, South side	Layer 1: Light gray soft/elastic material	NAD	SAT
40573.064 -07	Light gray sealant on vinyl window frames	Building D, North side	Layer 1: Light gray soft/elastic material with paint	NAD	SAT
40573.064 -08	Light gray sealant on vinyl window frames	Building D, South side	Layer 1: Light gray soft/elastic material with paint	NAD	SAT
40573.064 -09	Light gray sealant between reilight frame and door frame	Building A, West side	Layer 1: Light gray soft/elastic material with paint	NAD	SAT
40573.064 -10	Light gray sealant between reilight frame and door frame	Building B, East side	Layer 1: Light gray soft/elastic material	NAD	SAT
40573.064 -11	Light gray sealant between reilight frame and door frame	Building C, South side	Sample not submitted		
40573.064 -12	Light gray sealant between reilight frame and door frame	Building D, North side	Layer 1: Light gray soft/elastic material	NAD	SAT
40573.064 -13	Tan paint and gray sealant on sliding glass door frame	Building A, West side	Layer 1: Gray soft/elastic material with tan paint	NAD	SAT

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.064 -14	Tan paint and gray sealant on sliding glass door frame	Building B, East side	Layer 1: Gray soft/elastic material with tan paint	NAD	SAT
40573.064 -15	Tan paint and gray sealant on sliding glass door frame	Building C, South side	Layer 1: Gray soft/elastic material with tan paint	NAD	SAT
40573.064 -16	Tan paint and gray sealant on sliding glass door frame	Building D, North side	Layer 1: Gray soft/elastic material with tan paint	NAD	SAT
40573.064 -17	Exterior white stucco with a gray second layer	Building A, South side	Layer 1: White brittle material with paint Layer 2: Gray sandy/brittle material	NAD <1% Chrysotile	SAT
40573.064 -18	Exterior white stucco with a gray second layer	Building A, North side	Layer 1: White brittle/sandy material with paint Layer 2: Gray sandy/brittle material	NAD <1% Chrysotile	SAT
40573.064 -19	Exterior white stucco with a gray second layer	Building A, West side	Layer 1: White brittle/sandy material with paint Layer 2: Gray sandy/brittle material	NAD <1% Chrysotile	SAT
40573.064 -20	Exterior white stucco with a gray second layer	Building B, West side	Layer 1: White brittle/sandy material with paint Layer 2: Gray sandy/brittle material	NAD <1% Chrysotile	SAT
40573.064 -21	Exterior white stucco with a gray second layer	Building B, East side	Layer 1: White brittle/sandy material with paint Layer 2: Trace gray sandy/brittle material	NAD <1% Chrysotile	SAT
40573.064 -22	Exterior white stucco with a gray second layer	Building C, East side	Layer 1: White brittle/sandy material with paint Layer 2: Gray sandy/brittle material	NAD <1% Chrysotile	SAT
40573.064 -23	Exterior white stucco with a gray second layer	Building C, West side	Layer 1: White brittle/sandy material with paint Layer 2: Gray sandy/brittle material	NAD <1% Chrysotile	SAT
40573.064 -24	Exterior white stucco with a gray second layer	Building D, West side	Layer 1: White brittle/sandy material with paint	NAD	SAT

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
			Layer 2: Gray sandy/brittle material	<1% Chrysotile	
40573.064 -25	Exterior white stucco with a gray second layer	Building D, East side	Layer 1: White brittle/sandy material with paint Layer 2: Gray sandy/brittle material	NAD <1% Chrysotile	SAT
40573.064 -26	Brown paper under wood siding	Building A, North side	Layer 1: Brown paper with trace white powdery material	NAD	SAT
40573.064 -27	Paper and debris on fiberglass	Building A, North side in pipe penetration	Layer 1: Trace paper with paint Layer 2: Yellow fibrous material	NAD NAD	SAT
40573.064 -28	Green pebble pattern sheet vinyl Gray backing, mastic	Building A, Laundry room	Layer 1: Green sheet vinyl Layer 2: Gray fibrous material with mastic	NAD NAD	SAT
40573.064 -29	White sheet vinyl with gray spots Yellow mastic	Building A, Elevator	Layer 1: White/gray sheet vinyl Layer 2: Gray fibrous material with mastic	NAD NAD	SAT
40573.064 -30	Brown carpet mastic over Orange sheet vinyl Gray back	Building A, Foyer under carpet	Layer 1: Brown mastic Layer 2: Orange sheet vinyl Layer 3: Gray fibrous material with mastic	NAD NAD 46% Chrysotile	SAT
40573.064 -31	Pink square pattern sheet vinyl Gray backing with mastic	Building A, Women's restroom	Layer 1: Pink sheet vinyl Layer 2: Gray fibrous material with mastic	NAD NAD	SAT
40573.064 -32	Green pebble pattern sheet vinyl Gray backing with mastic	Building B, Laundry room	Layer 1: Green sheet vinyl Layer 2: Gray fibrous material with mastic	NAD NAD	SAT
40573.064 -33	Brown carpet mastic over Orange sheet vinyl Gray backing with mastic	Building C, Foyer under carpet	Layer 1: Brown mastic Layer 2: Orange sheet vinyl Layer 3: Gray fibrous material with mastic	NAD NAD 47% Chrysotile	SAT

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.064 -34	Light blue sheet vinyl with gray spots over Orange sheet vinyl with Gray backing and Mastic	Building C, Laundry room	Layer 1: Light blue sheet vinyl Layer 2: Gray fibrous material with mastic Layer 3: Orange sheet vinyl Layer 4: Gray fibrous material with mastic	NAD NAD NAD 44% Chrysotile	SAT
40573.064 -35	12" square pattern gray sheet vinyl with Gray backing and Mastic	Building D, Laundry room	Layer 1: Gray sheet vinyl Layer 2: Gray fibrous material with mastic Layer 3: Green sheet vinyl Layer 4: Gray fibrous material with mastic	NAD NAD NAD NAD	SAT
40573.064 -36	Brown carpet mastic over Orange sheet vinyl with Gray backing and mastic	Building D, Foyer	Layer 1: Brown mastic Layer 2: Orange sheet vinyl Layer 3: Gray fibrous material with mastic	NAD NAD 49% Chrysotile	SAT
40573.064 -37	White ceramic tile White caulk Brown mastic	Building A, Men's locker room	Layer 1: White ceramic Layer 2: White soft/elastic material Layer 3: Brown mastic	NAD NAD NAD	SAT
40573.064 -38	White paint Red rubberized wall covering White mastic and Joint compound	Building D, Foyer on wall	Layer 1: Red soft/elastic material with woven fibrous material and paint Layer 2: White mastic Layer 3: Off-white powdery material	NAD NAD 2% Chrysotile	SAT
40573.064 -39	Brown and white covebase mastic	Building A Women's restroom	Layer 3: White/brown mastic	NAD	SAT
40573.064 -40	Brown covebase and white mastic	Building A Elevator	Layer 1: Brown rubbery material Layer 2: White mastic	NAD NAD	SAT
40573.064 -41	Overspray under carpet	Building A, Floor 3 Hall	Layer 1: Gray sandy/brittle material with powdery material	3% Chrysotile	SAT

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.064 -42	Yellow carpet mastic	Building A, Floor 3 Hall	Layer 1: Yellow mastic	NAD	SAT
40573.064 -43	Fire door core	Building B, Door on roof dog house	Layer 1: White powdery material	6% Chrysotile 3% Amosite	SAT
40573.064 -44	Black sealant over Silver coat on Black asphaltic base	Building A, Parapet wall	Layer 1: Black asphaltic material Layer 2: Silver paint Layer 3: Black asphaltic material with fibrous material	NAD 3% Chrysotile 18% Chrysotile	SAT
40573.064 -45	3-tab single black paper	Building A, Dog house roof	Layer 1: Black asphaltic material with sand Layer 2: Black asphaltic fibrous material	NAD NAD	SAT
40573.064 -46	Newer black granular asphaltic roofing	Building A, Placed over older silver coat roofing	Layer 1: Black asphaltic material with sand Layer 2: Black asphaltic material	NAD NAD	SAT
40573.064 -47	Black sealant placed over Silver coat roofing on a layer of asphaltic roofing Silver coat over black asphaltic roofing	Building A, Roof midsection	Layer 1: Black asphaltic material Layer 2: Silver paint Layer 3: Black asphaltic material Layer 4: Trace silver paint Layer 5: Black asphaltic material	4% Chrysotile 2% Chrysotile NAD NAD NAD	SAT
40573.064 -48	Fibrous insulation later under roofing	Building A, Roof midsection	Layer 1: Black asphaltic material with woven fibrous material Layer 2: Brown fibrous material	NAD NAD	SAT
40573.064 -49	Hot mop - Black asphaltic layer on wood	Building A, Roof midsection	Layer 1: Black asphaltic material Layer 2: Brown wood debris	NAD NAD	SAT
40573.064 -50	Black rubberized roofing Black mastic	Building A, Elevator riser	Layer 1: Black rubbery material Layer 2: Black asphaltic material	NAD NAD	SAT
40573.064 -51	Black asphaltic layer over Silver coat black asphaltic layer and	Building B, Roof	Layer 1: Black asphaltic material Layer 2: Silver paint	NAD 2% Chrysotile	SAT

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
	Fibrous insulation		Layer 3: Black asphaltic material Layer 4: Black asphaltic material with fibrous material Layer 5: Brown fibrous material	5% Chrysotile NAD NAD	
40573.064 -52	Black asphaltic Hot mop layer on wood	Building B, Roof	Layer 1: Black asphaltic material Layer 2: Brown wood debris	4% Chrysotile NAD	SAT
40573.064 -53	Silver coat on Black asphaltic base	Building B, Parapet wall	Layer 1: Silver paint Layer 2: Black asphaltic material Layer 3: Black asphaltic fibrous material Layer 4: Black asphaltic material	NAD NAD 15% Chrysotile 3% Chrysotile	SAT
40573.064 -54	3-tab shingle Black paper	Building B, Dog house roof	Layer 1: Black asphaltic material with sand Layer 2: Black asphaltic fibrous material	NAD NAD	SAT
40573.064 -55	Silver coat on Black asphaltic material Silver coat over Black asphaltic material Insulation layer (fibrous)	Building C, Roof	Layer 1: Black asphaltic material with sand Layer 2: Silver paint Layer 3: Black asphaltic material with woven fibrous material Layer 4: Silver paint Layer 5: Black asphaltic material Layer 6: Brown fibrous material	NAD 2% Chrysotile NAD NAD NAD NAD	SAT
40573.064 -56	Hot mop layer on wood	Building C, Roof	Layer 1: Black asphaltic material Layer 2: Brown wood debris	NAD NAD	SAT
40573.064 -57	Silver coat on black asphaltic base Silver coat on black asphaltic material Silver coat on black asphaltic material Brown fibrous insulation Hot mop layer on wood	Building C, Parapet wall	Layer 1: Silver paint Layer 2: Black asphaltic material Layer 3: Silver paint Layer 4: Black asphaltic fibrous material Layer 5: Brown fibrous material Layer 6: Black asphaltic material	2% Chrysotile 5% Chrysotile 2% Chrysotile 17% Chrysotile NAD NAD	SAT
40573.064 -58	Silver coat on	Building D, Roof	Layer 1: Silver paint	NAD	

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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
	Black asphaltic material		Layer 2: Black asphaltic material with woven fibrous material	NAD	SAT
	Silver coat on black asphaltic material		Layer 3: Silver paint	2% Chrysotile	
	Brown fibrous insulation		Layer 4: Black asphaltic material with woven fibrous material		
	Hot mop layer on wood		Layer 5: Brown fibrous material	NAD	
			Layer 6: Black asphaltic material	NAD	
40573.064 -59	Gray and black coating on fireplace stack	Building D, Roof fireplace stack	Layer 1: Black/gray asphaltic material	4% Chrysotile	SAT
40573.064 -60	Black sealant	Building D, Parapet wall	Layer 1: Black asphaltic material	NAD	SAT
40573.064 -61	Wall texture	Building A, Floor 3 storage room	Layer 1: Trace off-white powdery material with paint	2% Chrysotile	SAT
40573.064 -62	Wall texture	Building B, Floor 3 hall	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
40573.064 -63	Wall texture	Building B, Floor 2 hall	Layer 1: Trace white powdery material with paint	NAD	SAT
40573.064 -64	Wall texture	Building C, Floor 1 hall	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
40573.064 -65	Wall texture	Building C, Floor 3 hall	Layer 1: White powdery material with paint	NAD	SAT
40573.064 -66	Wall texture	Building D, Floor 2 hall	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
40573.064 -67	Popcorn ceiling texture	Building A, Floor 1 hall	Layer 1: White soft lumpy material with paint	3% Chrysotile	SAT
40573.064 -68	Popcorn ceiling texture	Building B, Floor 3 hall	Layer 1: White soft lumpy material with paint	3% Chrysotile	SAT
40573.064 -69	Popcorn ceiling texture	Building C, Floor 3 hall	Layer 1: White soft lumpy material with paint	3% Chrysotile	SAT

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.064 -70	Popcorn ceiling texture	Building D, Floor 2 hall	Layer 1: White soft lumpy material with paint	3% Chrysotile	SAT
40573.064 -71	Joint compound Gypsum wallboard	Building B, Hall	Layer 1: Off-white powdery material with paint Layer 2: White chalky material with paper	2% Chrysotile NAD	SAT
	<i>Composite result<1%</i>				
40573.064 -72	Joint compound Gypsum wallboard	Building C, Hall	Layer 1: Off-white powdery material with paint Layer 2: White chalky material with paper	2% Chrysotile NAD	SAT
	<i>Composite result<1%</i>				
40573.064 -73	Joint compound Gypsum wallboard	Building D, Hall	Layer 1: Off-white powdery material with paint Layer 2: White chalky material with paper	2% Chrysotile NAD	SAT
	<i>Composite result<1%</i>				
40573.064 -74	Wall texture	Building A #8, Living room - 1st Floor	Layer 1: Trace white powdery material with paint	NAD	SAT
40573.064 -75	Wall texture	Building A #15, Bedroom - 2nd Floor	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
40573.064 -76	Wall texture	Building B #1, Bedroom - 1st Floor	Layer 1: Trace white powdery material with paint	NAD	SAT
40573.064 -77	Wall texture	Building B #23, Living room - 3rd Floor	Layer 1: Trace white powdery material with paint	NAD	SAT
40573.064 -78	Wall texture	Building C #11, Bedroom - 2nd Floor	Layer 1: Trace white powdery material with paint	NAD	SAT
40573.064 -79	Wall texture	Building C #27, Bedroom - 3rd Floor	Layer 1: Trace white powdery material with paint	NAD	SAT

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.064 -80	Wall texture	Building D #5, Bedroom - 1st Floor	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
40573.064 -81	Wall texture	Building D #23, Bedroom - 3rd Floor	Layer 1: Trace white powdery material with paint	NAD	SAT
40573.064 -82	Popcorn ceiling texture	Building A #25, Living room - 3rd Floor	Layer 1: White soft lumpy material with paint	3% Chrysotile	SAT
40573.064 -83	Popcorn ceiling texture	Building A #17, Kitchen - 2nd Floor	Layer 1: White soft lumpy material with paint	3% Chrysotile	SAT
40573.064 -84	Popcorn ceiling texture	Building B #1, Living room - 1st Floor	Layer 1: White soft lumpy material with paint	2% Chrysotile	SAT
40573.064 -85	Popcorn ceiling texture	Building B #12, Bedroom - 2nd Floor	Layer 1: White soft lumpy material with paint	3% Chrysotile	SAT
40573.064 -86	Popcorn ceiling texture	Building C #11, Living room - 2nd Floor	Layer 1: White soft lumpy material with paint	2% Chrysotile	SAT
40573.064 -87	Popcorn ceiling texture	Building C #8, Living room - 1st Floor	Layer 1: White soft lumpy material with paint	2% Chrysotile	SAT
40573.064 -88	Popcorn ceiling texture	Building D #24, Living room - 3rd Floor	Layer 1: White soft lumpy material with paint	2% Chrysotile	SAT
40573.064 -89	Popcorn ceiling texture	Building D #5, Living room - 1st Floor	Layer 1: White soft lumpy material with paint	2% Chrysotile	SAT
40573.064 -90	Joint compound Gypsum wallboard	Building A #8, Bedroom - 1st Floor	Layer 1: Trace off-white powdery material with paint Layer 2: Trace white chalky material with paper	2% Chrysotile NAD	SAT
	<i>Composite result <1%</i>				
40573.064 -91	Joint compound Gypsum wallboard	Building A #24, Living room - 3rd Floor	Layer 1: Off-white powdery material with paint Layer 2: White chalky material with paper	2% Chrysotile NAD	SAT

PLM ASBESTOS SAMPLE INVENTORY

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<i>Composite result <1%</i>					
40573.064 -92	Joint compound	Building B #23, Bedroom - 3rd Floor	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
	Gypsum wallboard		Layer 2: White chalky material with paper	NAD	
<i>Composite result <1%</i>					
40573.064 -93	Joint compound	Building B #12, Bedroom - 2nd Floor	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
	Gypsum wallboard		Layer 2: White chalky material with paper	NAD	
<i>Composite result <1%</i>					
40573.064 -94	Joint compound	Building C #27, Bedroom - 3rd Floor	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
	Gypsum wallboard		Layer 2: White chalky material with paper	NAD	
<i>Composite result <1%</i>					
40573.064 -95	Joint compound	Building C #8, Living room - 1st Floor	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
	Gypsum wallboard		Layer 2: White chalky material with paper	NAD	
<i>Composite result <1%</i>					
40573.064 -96	Joint compound	Building D #27, Bedroom - 3rd Floor	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
	Gypsum wallboard		Layer 2: White chalky material with paper	NAD	
<i>Composite result <1%</i>					
40573.064 -97	Joint compound	Building D #3, Bedroom - 1st Floor	Layer 1: Off-white powdery material with paint	2% Chrysotile	SAT
	Gypsum wallboard		Layer 2: White chalky material with paper	NAD	
<i>Composite result <1%</i>					
40573.064 -98	Wood deck coating	Building C #19, Exterior - 2nd Floor	Layer 1: Gray paint	NAD	SAT

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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.064 -99	Overspray under carpet	Building D #13, Living room - 2nd Floor	Layer 1: Tan foamy material with powdery material	NAD	SAT
40573.064 -100	Overspray under carpet	Building D #24, Living room - 3rd Floor	Layer 1: Gray sandy/brittle material with fibrous material and wood debris	<1% Chrysotile	
40573.064 -101	Overspray under carpet	Building C #4, Bedroom - 1st Floor	Layer 1: Tan powdery material	2% Chrysotile	SAT
40573.064 -102	Overspray under carpet	Building C #7, Living room - 1st Floor	Layer 1: Tan powdery material	2% Chrysotile	SAT
40573.064 -103	Carpet mastic (brown)	Building C #7, Living room - 1st Floor	Layer 1: Brown mastic Layer 2: Gray foamy material	NAD NAD	SAT
40573.064 -104	Laminate counter with Mastic	Building D #24, Kitchen - 3rd Floor	Layer 1: Brown/blue brittle/rigid material Layer 2: Brown mastic	NAD NAD	SAT
40573.064 -105	Covebase mastic (ivory)	Building D #3, Bathroom - 1st Floor	Layer 1: Ivory mastic	NAD	SAT
40573.064 -106	Covebase mastic (brown)	Building B #8, Bathroom - 1st Floor	Layer 1: Brown mastic with paper	NAD	SAT
40573.064 -107	Covebase mastic (ivory)	Building A # 24, Bathroom - 3rd Floor	Layer 1: Ivory mastic	NAD	SAT
40573.064 -108	Sheet floor (wood pattern)	Building A #24 at entry under carpet - 3rd Floor	Layer 1: Brown sheet vinyl Layer 2: Gray fibrous material with mastic	NAD 50% Chrysotile	SAT
40573.064 -109	Sheet floor (tan 12" square pattern with 2 layers)	Building A #8, Main bathroom - 1st Floor	Layer 1: Tan sheet vinyl Layer 2: Gray fibrous material with mastic Layer 3: Gray sheet vinyl Layer 4: Gray fibrous material with mastic Layer 5: Off-white sheet vinyl Layer 6: Gray fibrous material with mastic	NAD NAD NAD NAD NAD NAD	SAT

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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.064 -110	Sheet floor (tan 12" square top layer with 3 below)	Building A #17, Kitchen/Dining room - 2nd Floor	Layer 1: Tan sheet vinyl	NAD	SAT
			Layer 2: Gray fibrous material with mastic	NAD	
			Layer 3: White tile	2% Chrysotile	
			Layer 4: Black mastic	3% Chrysotile	
			Layer 5: White tile	2% Chrysotile	
			Layer 6: Yellow mastic	NAD	
			Layer 7: White tile	2% Chrysotile	
			Layer 8: Black mastic	2% Chrysotile	
40573.064 -111	Sheet floor (tan 12" square top with 2 below)	Building A #15, Kitchen - 2nd Floor	Layer 1: Tan sheet vinyl	NAD	SAT
			Layer 2: Gray fibrous material with mastic	NAD	
			Layer 3: Gray sandy/brittle material	NAD	
			Layer 4: Gray sheet vinyl	NAD	
			Layer 5: Gray fibrous material with mastic	NAD	
			Layer 6: Gray brittle material	NAD	
			Layer 7: Off-white sheet vinyl	NAD	
			Layer 8: Gray fibrous material with mastic	NAD	
40573.064 -112	12" floor tile (tan speckled)	Building A #25, Kitchen - 3rd Floor	Layer 1: Tan tile Layer 2: Black mastic	2% Chrysotile 3% Chrysotile	SAT
40573.064 -113	Sheet floor (tan 12" square top with 4 layers below)	Building B #23, Bathroom - 3rd Floor	Layer 1: Tan sheet vinyl	NAD	SAT
			Layer 2: Gray fibrous material with mastic	NAD	
			Layer 3: Gray sheet vinyl	NAD	
			Layer 4: Gray fibrous material with mastic	NAD	
			Layer 5: Off-white sheet vinyl	NAD	
			Layer 6: Gray fibrous material with mastic	NAD	
			Layer 7: Off-white sheet vinyl	NAD	

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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
			Layer 8: Gray fibrous material with mastic	NAD	
			Layer 9: Beige sheet vinyl	NAD	
			Layer 10: Gray fibrous material	NAD	
			Layer 11: Black mastic	2% Chrysotile	
			Layer 12: Gray sandy/brittle material	NAD	
40573.064 -114	Sheet floor (tan 12" square top with 3 layers and 12" floor)	Building B #25, Kitchen - 3rd Floor	Layer 1: Tan sheet vinyl	NAD	SAT
			Layer 2: Gray fibrous material with mastic	NAD	
			Layer 3: Gray sheet vinyl	NAD	
			Layer 4: Gray fibrous material with mastic	NAD	
			Layer 5: Off-white sheet vinyl	NAD	
			Layer 6: Gray fibrous material with mastic	NAD	
			Layer 7: Tan file	2% Chrysotile	
			Layer 8: Black mastic	3% Chrysotile	
40573.064 -115	Sheet floor (tan 12" square top with 4 layers)	Building C #27, Bathroom - 3rd Floor	Layer 1: Tan sheet vinyl	NAD	SAT
			Layer 2: Gray fibrous material with mastic	NAD	
			Layer 3: Gray sheet vinyl	NAD	
			Layer 4: Gray fibrous material with mastic	NAD	
			Layer 5: Off-white sheet vinyl	NAD	
			Layer 6: Gray fibrous material with mastic	NAD	
			Layer 7: Off-white sheet vinyl	NAD	
			Layer 8: Gray fibrous material with mastic	NAD	
			Layer 9: Beige sheet vinyl	NAD	
			Layer 10: Gray fibrous material	NAD	
			Layer 11: Black mastic	2% Chrysotile	
			Layer 12: Gray sandy/brittle material	NAD	

PLM ASBESTOS SAMPLE INVENTORY

<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
40573.064 -116	Sheet floor (tan 12" square top with 1 layer below)	Building C #20, Kitchen - 3rd Floor	Layer 1: Tan sheet vinyl Layer 2: Gray fibrous material with mastic Layer 3: Gray sheet vinyl Layer 4: Gray fibrous material with mastic Layer 5: White tile Layer 6: Black mastic	NAD NAD NAD NAD 2% Chrysotile 3% Chrysotile	SAT
40573.064 -117	Sheet floor (tan 12" square top with layer below)	Building C #19, Main bathroom - 2nd Floor	Layer 1: Tan sheet vinyl Layer 2: Gray fibrous material with mastic Layer 3: Gray sheet vinyl Layer 4: Gray fibrous material with mastic Layer 5: Off-white sheet vinyl Layer 6: Gray fibrous material with mastic Layer 7: Tan sheet vinyl Layer 8: Gray fibrous material with mastic	NAD NAD NAD NAD NAD NAD NAD	SAT
40573.064 -118	Sheet floor (ivory 4" square) under carpet	Building C #7, Living room - 1st Floor	Layer 1: Tan sheet vinyl Layer 2: Gray fibrous material with mastic Layer 3: Off-white sheet vinyl Layer 4: Gray fibrous material with mastic Layer 5: Gray sandy/brittle material	NAD NAD NAD NAD	SAT
40573.064 -119	Sheet floor (tan 12" square top with 2 layers below)	Building D #3, Bathroom - 1st Floor	Layer 1: Tan fibrous material with mastic Layer 2: Gray fibrous material with mastic Layer 3: Off-white sheet vinyl	NAD NAD NAD	SAT

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<u>PBS Sample #</u>	<u>Material Type</u>	<u>Sample Location</u>	<u>Lab Description</u>	<u>Lab Result</u>	<u>Lab</u>
			Layer 4: Gray fibrous material with mastic	NAD	
			Layer 5: Yellow sheet vinyl	NAD	
			Layer 6: Gray fibrous material with mastic	50% Chrysotile	
40573.064 -120	Sheet floor (tan 12' square top with 1 layer below)	Building D #24, Kitchen - 3rd Floor	Layer 1: Tan sheet vinyl	NAD	SAT
			Layer 2: Gray fibrous material with mastic	NAD	
			Layer 3: Off-white sheet vinyl	NAD	
			Layer 4: Gray fibrous material	NAD	
			Layer 5: Black mastic	2% Chrysotile	
			Layer 6: Gray sandy/brittle material	NAD	
40573.064 -121	Sink undercoat (ivory)	Building B #1, Kitchen - 1st Floor	Layer 1: White brittle material with fibrous material	NAD	SAT
40573.064 -122	12" White vinyl floor tile with a texture Yellow mastic and paper	Building D, 1st Floor, laundry room closet	Layer 1: White/tan tile	2% Chrysotile	SAT
			Layer 2: Brown fibrous material with yellow mastic	50% Chrysotile	

SAT



#201114144

Project: KC11A - meadowbrook Apartment Village

Project #: 40573.064

Analysis requested: PCM

Date: 10/17/11

Relinqu'd by/Signature: Janet Murphy

Date/Time: 10/17/11

Received by/Signature: [Signature]

Date/Time: 10/17/11, 16:45

Fax results to:

- Brian Stanford
- Ernest Edwards
- Gregg Middaugh
- Mark Hiley
- Prudy Stoudt-McRae
- Joe Lucas
- Janet Murphy
- Willem Mager
- Ferman Fletcher
- Tim Ogden
- Mike Smith
- Chuck Greeb

TURN AROUND TIME:

- 1 Hour
- 2 Hours
- 4 Hours
- 24 Hours
- 48 Hours
- 3-5 Days
- Other _____

BULK SAMPLE DATA FORM				
Lab #	Sample #	Material	Location	Lab
	40573.064	Light Gray Sealant on vinyl window frames	Building A. West Side	
	1		Building A. East Side	
	2	"	Building B. West Side	
	3	"	Building B. East Side	
	4	"	Building C. North Side	
	5	"	Building C. South Side	
	6	"	Building D. North Side	
	7	"	Building D. South Side	
	8	"	Building A. West Side	
	9	Light Gray Sealant between rec-light frame and door frame	Building B. East Side	
	10	"	Building C. South Side	
	11	"	Building D. North Side	
	12	"	Building A. West Side	
	13	Tan Point and gray sealant on Sliding Glass Door Frame	Building B. East Side	
	14	"	Building C. South Side	
	15	"		



#20114144

Project: KCHA-Meadowbrook Apartment Village

Project #: 40573.064

Analysis requested: PLM

Date: 10/27/11

Relinqu'd by/Signature: Janet Murphy

Date/Time: 10/17/11

Received by/Signature: E. DUTTON

Date/Time: 10/17/11, 10:45

Fax results to:

- Brian Stanford
- Ernest Edwards
- Gregg Middaugh
- Mark Hiley
- Prudy Stoudt-McRae
- Joe Lucas
- Janet Murphy
- Willem Mager
- Ferman Fletcher
- Tim Ogden
- Mike Smith
- Chuck Greeb

TURN AROUND TIME:

- 1 Hour
- 2 Hours
- 4 Hours
- 24 Hours
- 48 Hours
- 3-5 Days
- Other _____

BULK SAMPLE DATA FORM				
Lab #	Sample #	Material	Location	Lab
	40573.064			
	16	"	Building D. Northside	
	17	Exterior white stucco with a gray second layer	Building A South Side	
	18	"	Building A North Side	
	19	"	Building A West Side	
	20	"	Building B. West Side	
	21	"	Building B. East Side	
	22	"	Building C East Side	
	23	"	Building C West Side	
	24	"	Building D West Side	
	25	"	Building D East Side	
	26	Brown Paper under wood Siding	Building A N. Side	
	27	Paper and debris on fiberglass	Building A. North side in Pipe penetration	

SEATTLE ASBESTOS TEST, LLC

NVLAP Accredited - Bellevue:200876; Lynnwood:200768

Lynnwood Laboratory: 19711 Scriber Lake Rd, Suite D, Lynnwood, WA 98036; Tel: 425.673.9850, Fax:425.673.9810

Bellevue Laboratory: 12727 Northup Way, Suite I, Bellevue, WA 98005; Tel: 425.861.1111, Fax: 425.861.1118

Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT**

PLM by Method EPA/600/R-93/116

Attn.: Ms. Janet Murphy
 Client: PBS Engineering and Environmental, Seattle
 Address: 2517 Eastlake Ave. E., Suite 100
 Seattle, WA 98102

Client Job #: 40573.064
 Laboratory Batch #: 201114144
 Date Received: 10/17/2011
 Samples Received: 26
 Date Analyzed: 10/18/2011
 Samples Analyzed: 26

Project: KCHA - Meadowbrook Apartment Village

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
1	40573.064-1	1	Light gray soft/elastic material		None detected	Binder, Filler	3	Cellulose
2	40573.064-2	1	Light gray soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
3	40573.064-3	1	Light gray soft/elastic material with paint		None detected	Binder, Filler, Paint	3	Cellulose
4	40573.064-4	1	Light gray soft/elastic material with paint		None detected	Binder, Filler, Paint	5	Cellulose
5	40573.064-5	1	Light gray soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
6	40573.064-6	1	Light gray soft/elastic material		None detected	Binder, Filler	3	Cellulose
7	40573.064-7	1	Light gray soft/elastic material with paint		None detected	Binder, Filler, Paint	4	Cellulose
8	40573.064-8	1	Light gray soft/elastic material with paint		None detected	Binder, Filler, Paint, Mastic/binder	4	Cellulose
9	40573.064-9	1	Light gray soft/elastic material with paint		None detected	Binder, Filler, Mastic/binder	3	Cellulose
10	40573.064-10	1	Light gray soft/elastic material		None detected	Binder, Filler	4	Cellulose
11	40573.064-11		Sample not submitted					
12	40573.064-12	1	Light gray soft/elastic material		None detected	Binder, Filler	4	Cellulose
13	40573.064-13	1	Gray soft/elastic material with tan paint		None detected	Binder, Filler, Paint,	6	Cellulose, Polyethylene
14	40573.064-14	1	Gray soft/elastic material with tan paint		None detected	Binder, Filler	5	Cellulose, Polyethylene
15	40573.064-15	1	Gray soft/elastic material with tan paint		None detected	Binder, Filler	6	Cellulose
16	40573.064-16	1	Gray soft/elastic material with tan paint		None detected	Binder, Filler	5	Cellulose
17	40573.064-17	1	White brittle material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Gray sandy/brittle material	<1	Chrysotile	Sands, Filler, Binder	4	Cellulose



Analyzed by: MacKenzie Kieft/Heather Mummy

Report reviewed by: Steve (Fanyao) Zhang, President

SEATTLE ASBESTOS TEST, LLC

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Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT**

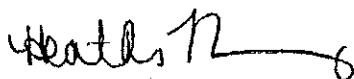
PLM by Method EPA/600/R-93/116

Attn.: Ms. Janet Murphy
 Client: PBS Engineering and Environmental, Seattle
 Address: 2517 Eastlake Ave. E., Suite 100
 Seattle, WA 98102

Client Job #: 40573.064
 Laboratory Batch #: 201114144
 Date Received: 10/17/2011
 Samples Received: 26
 Date Analyzed: 10/18/2011
 Samples Analyzed: 26

Project: KCHA - Meadowbrook Apartment Village

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
18	40573.064-18	1	White brittle/sandy material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray sandy/brittle material	<1	Chrysotile	Sands, Filler, Binder	3	Cellulose
19	40573.064-19	1	White brittle/sandy material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Gray sandy/brittle material	<1	Chrysotile	Sands, Filler, Binder	3	Cellulose
20	40573.064-20	1	White brittle/sandy material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Gray sandy/brittle material	<1	Chrysotile	Sands, Filler, Binder	2	Cellulose
21	40573.064-21	1	White brittle/sandy material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Trace gray sandy/brittle material	<1	Chrysotile	Sands, Filler, Binder	4	Cellulose
22	40573.064-22	1	White brittle/sandy material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray sandy/brittle material	<1	Chrysotile	Sands, Filler, Binder	5	Cellulose
23	40573.064-23	1	White brittle/sandy material with paint		None detected	Filler, Binder, Paint	3	Cellulose
		2	Gray sandy/brittle material	<1	Chrysotile	Sands, Filler, Binder	2	Cellulose
24	40573.064-24	1	White brittle/sandy material with paint		None detected	Filler, Binder, Paint	4	Cellulose
		2	Gray sandy/brittle material	<1	Chrysotile	Sands, Filler, Binder	3	Cellulose
25	40573.064-25	1	White brittle/sandy material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray sandy/brittle material	<1	Chrysotile	Sands, Filler, Binder	3	Cellulose
26	40573.064-26	1	Brown paper with trace white powdery material		None detected	Filler, Binder	87	Cellulose
27	40573.064-27	1	Trace paper with paint		None detected	Filler, Paint	76	Cellulose
		2	Yellow fibrous material		None detected	Filler, Glass beads	89	Glass fibers



Analyzed by: MacKenzie Kieft/Heather Mummy

Report reviewed by: Steve (Fanvao) Zhana, President

SAT



#201114181

P6-1

Common Areas.

Project: KCHA-Meadowbrook Apartment Village

Project #: 40573.064

Analysis requested: PLM

Date: 10/19/11

Relinqu'd by/Signature: Janet Murphy

Date/Time: 10/19/11 4:45 PM

Received by/Signature: E. Dutton

Date/Time: 10/19/11, 10:45

Fax results to:

- Brian Stanford
- Ernest Edwards
- Gregg Middaugh
- Mark Hiley
- Prudy Stoudt-McRae
- Joe Lucas
- Janet Murphy
- Willem Mager
- Ferman Fletcher
- Tim Ogden
- Mike Smith
- Chuck Greeb

TURN AROUND TIME:

- 1 Hour
- 2 Hours
- 4 Hours
- 24 Hours
- 48 Hours
- 3-5 Days
- Other _____

BULK SAMPLE DATA FORM				
Lab #	Sample #	Material	Location	Lab
	40573-28	Green Pebble Pattern Sheet Vinyl, gray backing, mastic	Bldg A Laundry Room	
	29	White sheet vinyl with gray spots, yellow mastic	Bldg A Elevator	
	30	Brown Carpet mastic over orange sheet vinyl, gray back	Bldg A Foyer Under Carpet	
	31	Pink square pattern sheet vinyl, gray backing, mastic	Bldg A Womens Restroom	
	32	Green Pebble Pattern Sheet Vinyl, gray backing, mastic	Bldg B Laundry Room	
	33	Brown Carpet mastic over orange sheet vinyl, gray backing, mastic	Bldg C Foyer Under Carpet	
	34	Light Blue sheet vinyl with gray spots over orange	Bldg C Laundry Room	
	35	Sheet vinyl with gray backing and mastic	Bldg D Laundry Room	
	36	12" square pattern gray sheet vinyl with gray backing and mastic	Bldg D Foyer	
	37	Brown Carpet mastic over orange sheet vinyl with gray backing and mastic	Bldg A Mens Locker Room	
	38	White ceramic tile, white caulk, brown mastic	Bldg D Foyer on wall	
		White Paint Red Rubberized wall covering, white mastic and joint compound		



#20114181

PG 2

Project: KCHA-meadowbrook Apartment Village

Project #: 40573.064

Analysis requested: PLM

Date: 10/19/11

Relinq'd by/Signature: Janet Murphy

Date/Time: 10/19/11

Received by/Signature: EDUHAN

Date/Time: 10/19/11, 10:45

Fax results to:

- Brian Stanford
- Ernest Edwards
- Gregg Middaugh
- Mark Hiley
- Prudy Stoudt-McRae
- Joe Lucas
- Janet Murphy
- Willem Mager
- Ferman Fletcher
- Tim Ogden
- Mike Smith
- Chuck Greeb

TURN AROUND TIME:

- 1 Hour
- 2 Hours
- 4 Hours
- 24 Hours
- 48 Hours
- 3-5 Days
- Other _____

BULK SAMPLE DATA FORM				
Lab #	Sample #	Material	Location	Lab
	39	Brown and white caobase Mastic	Bldg A Womens RR	
	40	Brown caobase and white Mastic	Bldg A Elevator	
	41	overspray under carpet	Bldg A Floor 3 Hall	
	42	yellow Carpet Mastic	Bldg A Floor 3 Hall	
	43	Fire Door Core.	Bldg B Door on Roof Dog House	
	44	Black Sealant over Silver coat on a black asphaltic base	Bldg A Parapet Wall on Dog House	
	45	3-Tab Single Black Paper	Bldg A Roof	
	46	Newer Black Granular asphaltic Roofing	Bldg A placed over older silvercoat roofing	
	47	Black Sealant placed over silvercoat Roofing on a Layer of Asphaltic Roofing	Bldg A, Roof Midsection	
		3. Silvercoat over black asphaltic roofing		
	48	Fibrous Insulation Layer under roofing	Bldg A, Roof Midsection	
	49	Hot Map Black Asphaltic Layer on Wood.	Bldg A, Roof Midsection	



#201114181

Pl-3

Project: KCHA - Meadowbrook Apartment VillageProject #: 40573.064Analysis requested: PCMDate: 10/19/11Relinqu'd by/Signature: Janet MurphyDate/Time: 10/19/11Received by/Signature: E. DuttonDate/Time: 10/19/11, 10:45

Fax results to:

- | | | |
|---|--|--|
| <input type="checkbox"/> Brian Stanford | <input type="checkbox"/> Prudy Stoudt-McRae | <input type="checkbox"/> Ferman Fletcher |
| <input type="checkbox"/> Ernest Edwards | <input type="checkbox"/> Joe Lucas | <input type="checkbox"/> Tim Ogden |
| <input type="checkbox"/> Gregg Middaugh | <input checked="" type="checkbox"/> Janet Murphy | <input type="checkbox"/> Mike Smith |
| <input type="checkbox"/> Mark Hiley | <input type="checkbox"/> Willem Mager | <input type="checkbox"/> Chuck Greeb |

TURN AROUND TIME:

- | | | |
|----------------------------------|--|--------------------------------------|
| <input type="checkbox"/> 1 Hour | <input type="checkbox"/> 24 Hours | <input type="checkbox"/> 3-5 Days |
| <input type="checkbox"/> 2 Hours | <input checked="" type="checkbox"/> 48 Hours | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> 4 Hours | | |

BULK SAMPLE DATA FORM				
Lab #	Sample #	Material	Location	Lab
	50.	Black Rubberized Roofing Black Mastic	Bldg A Elevator Riser	
	51.	Black Asphaltic Layer over Silver Coat Black Asphaltic Layer and Fibrous Insulation	Bldg B Roof	
	52.	Black Asphaltic Hot Mop Layer on wood	Bldg B Roof	
	53.	Silver Coat on a black Asphaltic base	Bldg B Parapet Wall	
	54.	3-Tab Shingle Black Paper	Bldg B Dog House Roof	
	55.	1. Silver coat on black asphaltic material 2. Silver coat over black asphaltic material Insulation Layer (fibrous)	Bldg C Roof	
	56.	Hot Mop Layer on wood	Bldg C Roof	
	57.	Silver coat on black asphaltic base Silver coat on black asphaltic material 2 silver coat on black asphaltic material Brown fibrous insulation Hot Mop Layer on wood.	Bldg C Parapet Wall	

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#20114181

P6-4

Project: KCHA-Meadowbrook Apartment Village

Project #: 40573.064

Analysis requested: PLM

Date: 10/19/11

Relinqu'd by/Signature: Janet Murphy

Date/Time: 10/19/11

Received by/Signature: E. Dutton

Date/Time: 10/19/11, 1045

Fax results to:

- Brian Stanford
- Ernest Edwards
- Gregg Middaugh
- Mark Hiley
- Prudy Stoudt-McRae
- Joe Lucas
- Janet Murphy
- Willem Mager
- Ferman Fletcher
- Tim Ogden
- Mike Smith
- Chuck Greeb

TURN AROUND TIME:

- 1 Hour
- 2 Hours
- 4 Hours
- 24 Hours
- 48 Hours
- 3-5 Days
- Other _____

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location	Lab
	58.	1 Silver coat on black asphaltic material 2 Silver coat on black asphaltic material 3 Brown Fibrous Insulation 4 Hot Mop Layer on wood	Bldg D Roof	
	59.	Gray and black coating on Fireplace stack	Bldg D Roof Fireplace Stack	
	60.	Black Sealant	Bldg D Parapet wall	
	61.	Wall Texture	Bldg A Fl. 3, Storage Room	
	62.	Wall Texture	Bldg B Fl. 3. Hall	
	63.	Wall Texture	Bldg B Fl. 2. Hall	
	64.	Wall Texture	Bldg C Fl. 1. Hall	
	65.	Wall Texture	Bldg C Fl. 3 Hall	
	66.	Wall Texture	Bldg D Fl. 2. Hall	
	67.	"Popcorn Ceiling Texture"	Bldg A Fl. 1. Hall	
	68.	"Popcorn Ceiling texture"	Bldg B. Fl. 3 Hall	
	69.	"Popcorn Ceiling Texture"	Bldg C Fl. 3 Hall	



#201114181

PG-5

Project: KCHA meadowbrook Apartment Village

Project #: 40573.064

Analysis requested: PLM

Date: 10/19/11

Relinqu'd by/Signature: Janet Murphy

Date/Time: 10/19/11

Received by/Signature: E. Dutton

Date/Time: 10/19/11, 10:45

Fax results to:

- Brian Stanford
- Ernest Edwards
- Gregg Middaugh
- Mark Hiley
- Prudy Stoudt-McRae
- Joe Lucas
- Janet Murphy
- Willem Mager
- Ferman Fletcher
- Tim Ogden
- Mike Smith
- Chuck Greeb

TURN AROUND TIME:

- 1 Hour
- 2 Hours
- 4 Hours
- 24 Hours
- 48 Hours
- 3-5 Days
- Other _____

BULK SAMPLE DATA FORM				
Lab #	Sample #	Material	Location	Lab
	70	"Popcorn ceiling texture"	Bldg D, Fl. 2, Hall	
	71	JL 164B	Bldg B Hall	
	72	JL 164B	Bldg C Hall	
	73	JL 164B	Bldg D Hall	

S:\Masters\Office\Tech Forms & Templates\Lab Chain-of-Custody.doc

SEATTLE ASBESTOS TEST, LLC

NVLAP Accredited - Bellevue:200876; Lynnwood:200768

Lynnwood Laboratory: 19711 Scriber Lake Rd, Suite D, Lynnwood, WA 98036; Tel: 425.673.9850, Fax:425.673.9810

Bellevue Laboratory: 12727 Northup Way, Suite 1, Bellevue, WA 98005; Tel: 425.861.1111, Fax: 425.861.1118

Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT
PLM by Method EPA/600/R-93/116**

Attn.: Ms. Janet Murphy
 Client: PBS Engineering and Environmental, Seattle
 Address: 2517 Eastlake Ave. E., Suite 100
 Seattle, WA 98102

Client Job #: 40573.064
 Laboratory Batch #: 201114181
 Date Received: 10/19/2011
 Samples Received: 46
 Date Analyzed: 10/20/2011
 Samples Analyzed: 46

Project: KCHA - Meadowbrook Apartment Village - Common Areas

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
1	40573-28	1	Green sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	67	Cellulose
2	40573-29	1	White/gray sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	71	Cellulose
3	40573-30	1	Brown mastic		None detected	Mastic/binder, Filler	3	Cellulose
		2	Orange sheet vinyl		None detected	Vinyl/binder		None detected
		3	Gray fibrous material with mastic	46	Chrysotile	Binder/filler, Mastic/binder	31	Cellulose
4	40573-31	1	Pink sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	68	Cellulose
5	40573-32	1	Green sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	70	Cellulose
6	40573-33	1	Brown mastic		None detected	Mastic/binder, Filler	4	Cellulose
		2	Orange sheet vinyl		None detected	Vinyl/binder		None detected
		3	Gray fibrous material with mastic	47	Chrysotile	Binder/filler, Mastic/binder	33	Cellulose
7	40573-34	1	Light blue sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	72	Cellulose
		3	Orange sheet vinyl		None detected	Vinyl/binder		None detected
		4	Gray fibrous material with mastic	44	Chrysotile	Binder/filler, Mastic/binder	36	Cellulose
8	40573-35	1	Gray sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	69	Cellulose
		3	Green sheet vinyl		None detected	Vinyl/binder		None detected
		4	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	65	Cellulose
9	40573-36	1	Brown mastic		None detected	Mastic/binder, Filler	3	Cellulose
		2	Orange sheet vinyl		None detected	Vinyl/binder		None detected
		3	Gray fibrous material with mastic	49	Chrysotile	Binder/filler, Mastic/binder	30	Cellulose
10	40573-37	1	White ceramic		None detected	Ceramic/binder		None detected
		2	White soft/elastic material		None detected	Binder, Filler	3	Cellulose
		3	Brown mastic		None detected	Mastic/binder	5	Cellulose
11	40573-38	1	Red soft/elastic material with woven fibrous material and paint		None detected	Binder, Filler, Paint	28	Cellulose
		2	White mastic		None detected	Mastic/binder	2	Cellulose
		3	Off-white powdery material	2	Chrysotile	Binder/filler	5	Cellulose
12	40573-39	1	White/brown mastic		None detected	Mastic/binder	4	Cellulose

Analyzed by: Heather Mummey

Report reviewed by: Steve (Fanyao) Zhang, President

SEATTLE ASBESTOS TEST, LLC

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 Website: http://www.seattleasbestostest.com, E-mail: admin@seattleasbestostest.com

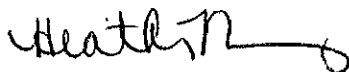
**ANALYTICAL LABORATORY REPORT
 PLM by Method EPA/600/R-93/116**

Attn.: Ms. Janet Murphy
 Client: PBS Engineering and Environmental, Seattle
 Address: 2517 Eastlake Ave. E., Suite 100
 Seattle, WA 98102

Client Job #: 40573.064
 Laboratory Batch #: 201114181
 Date Received: 10/19/2011
 Samples Received: 46
 Date Analyzed: 10/20/2011
 Samples Analyzed: 46

Project: KCHA - Meadowbrook Apartment Village - Common Areas

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
13	40573-40	1	Brown rubbery material		None detected	Rubber/binder	2	Cellulose
		2	White mastic		None detected	Mastic/binder	3	Cellulose
14	40573-41	1	Gray sandy/brittle material with powdery material	3	Chrysotile	Sands, Filler, Binder, Synthetic foam	5	Cellulose
15	40573-42	1	Yellow mastic		None detected	Mastic/binder, Filler	3	Cellulose
16	40573-43	1	White powdery material	6	Chrysotile	Binder, Filler	17	Cellulose
				3	Amosite			
17	40573-44	1	Black asphaltic material		None detected	Filler, Asphalt, Binder	10	Cellulose
		2	Silver paint	3	Chrysotile	Paint, Filler	3	Cellulose
		3	Black asphaltic material with fibrous material	18	Chrysotile	Asphalt/binder, Binder/filler	57	Cellulose
18	40573-45	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	31	Glass fibers
		2	Black asphaltic fibrous material		None detected	Asphalt/binder, Binder/filler	70	Cellulose
19	40573-46	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	29	Synthetic fibers
		2	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	42	Synthetic fibers
20	40573-47	1	Black asphaltic material	4	Chrysotile	Filler, Asphalt, Binder	8	Cellulose
		2	Silver paint	2	Chrysotile	Paint, Filler	2	Cellulose
		3	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	13	Synthetic fibers
		4	Trace silver paint		None detected	Paint, Filler	4	Cellulose
		5	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	25	Synthetic fibers, Cellulose
21	40573-48	1	Black asphaltic material with woven fibrous material		None detected	Asphalt/binder, Binder/filler	33	Glass fibers
		2	Brown fibrous material		None detected	Binder/filler	70	Cellulose
22	40573-49	1	Black asphaltic material		None detected	Filler, Asphalt, Binder	3	Cellulose
		2	Brown wood debris		None detected	Wood debris	7	Cellulose
23	40573-50	1	Black rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	16	Synthetic fibers
24	40573-51	1	Black asphaltic material		None detected	Filler, Asphalt, Binder	9	Cellulose
		2	Silver paint	2	Chrysotile	Paint, Filler	2	Cellulose
		3	Black asphaltic material	5	Chrysotile	Asphalt/binder, Binder/filler	18	Cellulose
		4	Black asphaltic material with fibrous material		None detected	Asphalt/binder, Binder/filler	30	Glass fibers
		5	Brown fibrous material		None detected	Binder/filler	69	Cellulose
25	40573-52	1	Black asphaltic material	4	Chrysotile	Asphalt/binder, Binder/filler	15	Cellulose
		2	Brown wood debris		None detected	Wood debris	6	Cellulose
26	40573-53	1	Silver paint		None detected	Paint, Filler	4	Wollastonite, Talc
		2	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	5	Cellulose
		3	Black asphaltic fibrous material	15	Chrysotile	Asphalt/binder, Binder/filler	57	Cellulose



Analyzed by: Heather Mummey

Report reviewed by: Steve (Fanyao) Zhang, President

SEATTLE ASBESTOS TEST, LLC

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Lynnwood Laboratory: 19711 Scriber Lake Rd, Suite D, Lynnwood, WA 98036; Tel: 425.673.9850, Fax:425.673.9810
 Bellevue Laboratory: 12727 Northup Way, Suite 1, Bellevue, WA 98005; Tel: 425.861.1111, Fax: 425.861.1118
 Website: http://www.seattleasbestostest.com, E-mail: admin@seattleasbestostest.com

ANALYTICAL LABORATORY REPORT
PLM by Method EPA/600/R-93/116

Attn.: Ms. Janet Murphy
 Client: PBS Engineering and Environmental, Seattle
 Address: 2517 Eastlake Ave. E., Suite 100
 Seattle, WA 98102

Client Job #: 40573.064
 Laboratory Batch #: 201114181
 Date Received: 10/19/2011
 Samples Received: 46
 Date Analyzed: 10/20/2011
 Samples Analyzed: 46

Project: KCHA - Meadowbrook Apartment Village - Common Areas

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
		4	Black asphaltic material	3	Chrysotile	Asphalt/binder, Binder/filler	4	Cellulose, Glass fibers
27	40573-54	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	31	Glass fibers
		2	Black asphaltic fibrous material		None detected	Asphalt/binder, Binder/filler	68	Cellulose
28	40573-55	1	Black asphaltic material with sand		None detected	Asphalt/binder, Sand	33	Glass fibers
		2	Silver paint	2	Chrysotile	Paint, Filler	2	Wollastonite, Taic
		3	Black asphaltic material with woven fibrous material		None detected	Asphalt/binder, Binder/filler	30	Cellulose, Glass fibers
		4	Silver paint		None detected	Paint, Filler	3	Wollastonite, Taic
		5	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	30	Glass fibers
		6	Brown fibrous material		None detected	Binder/filler	67	Cellulose
29	40573-56	1	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	5	Cellulose
		2	Brown wood debris		None detected	Wood debris	4	Cellulose
30	40573-57	1	Silver paint	2	Chrysotile	Paint, Filler	2	Cellulose
		2	Black asphaltic material	5	Chrysotile	Asphalt/binder, Binder/filler	16	Cellulose
		3	Silver paint	2	Chrysotile	Paint, Filler	3	Cellulose
		4	Black asphaltic fibrous material	17	Chrysotile	Asphalt/binder, Binder/filler	52	Cellulose
		5	Brown fibrous material		None detected	Binder/filler	71	Cellulose
		6	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	4	Cellulose
31	40573-58	1	Silver paint		None detected	Paint, Filler	3	Cellulose
		2	Black asphaltic material with woven fibrous material		None detected	Asphalt/binder, Binder/filler	28	Cellulose, Synthetic fibers
		3	Silver paint	2	Chrysotile	Paint, Filler	2	Cellulose
		4	Black asphaltic material with woven fibrous material		None detected	Asphalt/binder, Binder/filler	33	Cellulose, Glass fibers
		5	Brown fibrous material		None detected	Binder/filler	69	Cellulose
		6	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	4	Glass fibers
32	40573-59	1	Black/gray asphaltic material	4	Chrysotile	Asphalt/binder, Binder/filler	4	Cellulose
33	40573-60	1	Black asphaltic material		None detected	Asphalt/binder, Binder/filler	9	Cellulose
34	40573-61	1	Trace off-white powdery material with paint	2	Chrysotile	Binder/filler, Paint	5	Cellulose
35	40573-62	1	Off-white powdery material with paint	2	Chrysotile	Binder/filler, Paint	3	Cellulose
36	40573-63	1	Trace white powdery material with paint		None detected	Binder/filler, Paint	2	Cellulose
37	40573-64	1	Off-white powdery material with paint	2	Chrysotile	Binder/filler, Paint	5	Cellulose
38	40573-65	1	White powdery material with paint		None detected	Binder/filler, Paint	4	Cellulose
39	40573-66	1	Off-white powdery material with paint	2	Chrysotile	Binder/filler, Paint	3	Cellulose

Analyzed by: Heather Mummey



Report reviewed by: Steve (Fanyao) Zhang, President

SEATTLE ASBESTOS TEST, LLC

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Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT
PLM by Method EPA/600/R-93/116**

Attn.: Ms. Janet Murphy
 Client: PBS Engineering and Environmental, Seattle
 Address: 2517 Eastlake Ave. E., Suite 100
 Seattle, WA 98102

Client Job #: 40573.064
 Laboratory Batch #: 201114181
 Date Received: 10/19/2011
 Samples Received: 46
 Date Analyzed: 10/20/2011
 Samples Analyzed: 46

Project: KCHA - Meadowbrook Apartment Village - Common Areas

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
40	40573-67	1	White soft lumpy material with paint	3	Chrysotile	Synthetic foam, Filler, Binder, Paint	2	Cellulose
41	40573-68	1	White soft lumpy material with paint	3	Chrysotile	Synthetic foam, Filler, Binder, Paint	5	Cellulose
42	40573-69	1	White soft lumpy material with paint	3	Chrysotile	Synthetic foam, Filler, Binder, Paint	3	Cellulose
43	40573-70	1	White soft lumpy material with paint	3	Chrysotile	Synthetic foam, Filler, Binder, Paint	2	Cellulose
44	40573-71	1	Off-white powdery material with paint	2	Chrysotile	Binder/filler, Paint	2	Cellulose
		2	White chalky material with paper		None detected	Binder/filler Gypsum/binder	27	Cellulose
45	40573-72	1	Off-white powdery material with paint	2	Chrysotile	Binder/filler, Paint	3	Cellulose
		2	White chalky material with paper		None detected	Binder/filler Gypsum/binder	25	Cellulose
46	40573-73	1	Off-white powdery material with paint	2	Chrysotile	Binder/filler, Paint	5	Cellulose
		2	White chalky material with paper		None detected	Binder/filler Gypsum/binder	24	Cellulose

Analyzed by: Heather Mummey



Report reviewed by: Steve (Fanyao) Zhang, President



20114308

1/4

Project: KCHA - Meadowbrook aptzProject #: 40573.064Analysis requested: PLMDate: 10/20/11 & 10/24/11Relinqu'd by/Signature: Harry BorenDate/Time: 10/26/11Received by/Signature: Heather RDate/Time: 10/26/11 1715E-mail
Fax results to:

- | | | |
|---|--|--|
| <input type="checkbox"/> Brian Stanford | <input type="checkbox"/> Prudy Stoudt-McRae | <input type="checkbox"/> Ferman Fletcher |
| <input type="checkbox"/> Ernest Edwards | <input type="checkbox"/> Joe Lucas | <input type="checkbox"/> Tim Ogden |
| <input type="checkbox"/> Gregg Middaugh | <input checked="" type="checkbox"/> Janet Murphy | <input type="checkbox"/> Mike Smith |
| <input type="checkbox"/> Mark Hiley | <input type="checkbox"/> Willem Mager | <input type="checkbox"/> Chuck Greeb |

TURN AROUND TIME:

- | | | |
|----------------------------------|--|--------------------------------------|
| <input type="checkbox"/> 1 Hour | <input checked="" type="checkbox"/> 24 Hours | <input type="checkbox"/> 3-5 Days |
| <input type="checkbox"/> 2 Hours | <input type="checkbox"/> 48 Hours | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> 4 Hours | | |

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location (FLOOR)	Lab
	<u>40573</u>			
	<u>74</u>	<u>wall texture</u>	<u>Bldg A #8 LR 1ST FLR</u>	
	<u>75</u>		<u>" #15 BR (2)</u>	
	<u>76</u>		<u>Bldg B #1 BR (1)</u>	
	<u>77</u>		<u>" #23 LR (3)</u>	
	<u>78</u>		<u>Bldg C #11 BR (2)</u>	
	<u>79</u>		<u>" #27 BR (3)</u>	
	<u>80</u>		<u>Bldg D #5 BR (1)</u>	
	<u>81</u>	<u>wall texture</u>	<u>#23 BR (3)</u>	
	<u>82</u>	<u>popcorn cly. text</u>	<u>Bldg A #25 LR (3)</u>	
	<u>83</u>		<u>#17 KIT (2)</u>	
	<u>84</u>		<u>Bldg B #1 LR (1)</u>	
	<u>85</u>		<u>#12 BR (2)</u>	
	<u>86</u>		<u>Bldg C #11 LR (2)</u>	
	<u>87</u>		<u>#8 LR (1)</u>	
	<u>88</u>		<u>Bldg D #24 LR (3)</u>	
	<u>89</u>	<u>popcorn cly. text</u>	<u>#5 LR (1)</u>	



201114308

2/4

Project: KCHA - MEADOWBROOK APTSProject #: 40573.064Analysis requested: PLMDate: 10/20 & 10/24/11Relinqu'd by/Signature: Harry SorenDate/Time: 10/26/11Received by/Signature: Heath NDate/Time: 10/26/11 1715

E-MAIL

Fax results to:

- | | | |
|---|--|--|
| <input type="checkbox"/> Brian Stanford | <input type="checkbox"/> Prudy Stoudt-McRae | <input type="checkbox"/> Ferman Fletcher |
| <input type="checkbox"/> Ernest Edwards | <input type="checkbox"/> Joe Lucas | <input type="checkbox"/> Tim Ogden |
| <input type="checkbox"/> Gregg Middaugh | <input checked="" type="checkbox"/> Janet Murphy | <input type="checkbox"/> Mike Smith |
| <input type="checkbox"/> Mark Hiley | <input type="checkbox"/> Willem Mager | <input type="checkbox"/> Chuck Greeb |

TURN AROUND TIME:

- | | | |
|----------------------------------|--|--------------------------------------|
| <input type="checkbox"/> 1 Hour | <input checked="" type="checkbox"/> 24 Hours | <input type="checkbox"/> 3-5 Days |
| <input type="checkbox"/> 2 Hours | <input type="checkbox"/> 48 Hours | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> 4 Hours | | |

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location (FLOOR)	Lab
	90	GWBI/c	Bldg A #8 BR (1)	
	91	↓	" #24 LR (3)	
	92		Bldg B #23 BR (3)	
	93		" #12 BR (2)	
	94		Bldg C #27 BR (3)	
	95		" #8 LR (1)	
	96	↓	Bldg D #27 BR (3)	
	97	GWBI/c	Bldg D #3 BR (1)	
	98	Wood deck coating	Bldg C #19 EXT (2)	
	99	overspray under carpet	Bldg D #13 LR (2)	
	100	↓	" #24 LR (3)	
	101	↓	Bldg C #4 BR (1)	
	102	overspray under carpet	Bldg C #7 LR (1)	
	103	carpet mastic (brown)	Bldg C #7 LR (1)	
	104	laminated counter w/ mastic	Bldg D #24 KIT (3)	

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201114308

3/4

Project: KCHA - Meadowbrook aptsProject #: 40573.064Analysis requested: PLMDate: 10/20/11 & 10/24/11Relinq'd by/Signature: Harry BorenDate/Time: 10/26/11Received by/Signature: Heath NDate/Time: 10/26/11 1715

E-MAIL

Fax results to:

- | | | | | | |
|--------------------------|----------------|-------------------------------------|--------------------|--------------------------|-----------------|
| <input type="checkbox"/> | Brian Stanford | <input type="checkbox"/> | Prudy Stoudt-McRae | <input type="checkbox"/> | Ferman Fletcher |
| <input type="checkbox"/> | Ernest Edwards | <input type="checkbox"/> | Joe Lucas | <input type="checkbox"/> | Tim Ogden |
| <input type="checkbox"/> | Gregg Middaugh | <input checked="" type="checkbox"/> | Janet Murphy | <input type="checkbox"/> | Mike Smith |
| <input type="checkbox"/> | Mark Hiley | <input type="checkbox"/> | Willem Mager | <input type="checkbox"/> | Chuck Greeb |

TURN AROUND TIME:

- | | | | | | |
|--------------------------|---------|-------------------------------------|----------|--------------------------|-------------|
| <input type="checkbox"/> | 1 Hour | <input checked="" type="checkbox"/> | 24 Hours | <input type="checkbox"/> | 3-5 Days |
| <input type="checkbox"/> | 2 Hours | <input type="checkbox"/> | 48 Hours | <input type="checkbox"/> | Other _____ |
| <input type="checkbox"/> | 4 Hours | | | | |

BULK SAMPLE DATA FORM

Lab #	Sample #	Material	Location (FLOOR)	Lab
	105	cove base mastic (ivory)	Bldg D # 3 BATH (1)	
	106	cove base mastic (brown)	Bldg B # 8 BATH (1)	
	107	cove base mastic (ivory)	Bldg A # 24 BATH (3)	
	108	shlt floor (wood pattern)	Bldg A # 24 ^{under cpt} @ entry (3)	
	109	sheet floor (tan 12" Φ pattern w/ 2 layers)	# 8 Main BATH (1)	
	110	shlt floor (tan 12" Φ top layer w/ 3 below)	# 17 KIT/DR (2)	
	111	shlt flr (tan 12" Φ top w/ 2 below)	# 15 KIT (2)	
	112	12" floor tile (tan speckled)	Bldg A # 25 KIT (3)	
	113	shlt flr (tan 12" Φ top w/ 4 layers below)	Bldg B # 23 BATH (3)	
	114	shlt flr (tan 12" Φ top w/ 3 layers & 12" FT)	" # 25 KIT (3)	
	115	shlt flr (tan 12" Φ top w/ 4 layers)	Bldg C # 27 BATH (3)	
	116	shlt flr (tan 12" Φ top w/ 1 layer below)	# 20 KIT (3)	
	117	shlt flr (tan 12" Φ top w/ 1 layer below)	# 19 Main BATH (2)	
	118	shlt flr (ivory 4" Φ under carpet)	Bldg C # 7 LR (1)	
	119	shlt flr (tan 12" Φ top w/ 2 layers below)	Bldg D # # 3 BATH (1)	

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201114308

4/4

Project: KCHA - Meadowbrook apts

Project #: 40573.0CA

Analysis requested: PLM

Date: 10/20/11 & 10/24/11

Relinq'd by/Signature: Harry Loren

Date/Time: 10/26/11

Received by/Signature: Heath [Signature]

Date/Time: 10/26/11 1715

E-MAIL

Fax results to:

- | | | |
|---|--|--|
| <input type="checkbox"/> Brian Stanford | <input type="checkbox"/> Prudy Stoudt-McRae | <input type="checkbox"/> Ferman Fletcher |
| <input type="checkbox"/> Ernest Edwards | <input type="checkbox"/> Joe Lucas | <input type="checkbox"/> Tim Ogden |
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| <input type="checkbox"/> Mark Hiley | <input type="checkbox"/> Willem Mager | <input type="checkbox"/> Chuck Greeb |

TURN AROUND TIME:

- | | | |
|----------------------------------|--|--------------------------------------|
| <input type="checkbox"/> 1 Hour | <input checked="" type="checkbox"/> 24 Hours | <input type="checkbox"/> 3-5 Days |
| <input type="checkbox"/> 2 Hours | <input type="checkbox"/> 48 Hours | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> 4 Hours | | |

BULK SAMPLE DATA FORM				
Lab #	Sample #	Material	Location (Floor)	Lab
	120	slit flr (tan 12" 中 top w/ 1 layer below)	Bldg D # 24 KIT (3)	
	121	sink undercoat (wavy)	Bldg B #1 KIT (1)	

SEATTLE ASBESTOS TEST, LLC

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Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT
PLM by Method EPA/600/R-93/116**

Attn.: Ms. Janet Murphy
Client: PBS Engineering and Environmental, Seattle
Address: 2517 Eastlake Ave. E., Suite 100
Seattle, WA 98102

Client Job #: 40573.064
Laboratory Batch #: 201114308
Date Received: 10/28/2011
Samples Received: 48
Date Analyzed: 10/27/2011
Samples Analyzed: 48

Project: KCHA - Meadowbrook Apts

Lab ID	Client Sample ID	Layer	Description	% Asbestos Fibers	Non-Fibrous Components	% Non-asbestos Fibers
1	40573 - 74	1	Trace white powdery material with paint	None detected	Binder/filler, Paint	2 Cellulose
2	40573 - 75	1	Off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	4 Cellulose
3	40573 - 76	1	Trace white powdery material with paint	None detected	Binder/filler, Paint	3 Cellulose
4	40573 - 77	1	Trace white powdery material with paint	None detected	Binder/filler, Paint	5 Cellulose
5	40573 - 78	1	Trace white powdery material with paint	None detected	Binder/filler, Paint	2 Cellulose
6	40573 - 79	1	Trace white powdery material with paint	None detected	Binder/filler, Paint	3 Cellulose
7	40573 - 80	1	Off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	4 Cellulose
8	40573 - 81	1	Trace white powdery material with paint	None detected	Binder/filler, Paint	2 Cellulose
9	40573 - 82	1	White soft lumpy material with paint	3 Chrysotile	Synthetic foam, Filler, Binder, Paint	3 Cellulose
10	40573 - 83	1	White soft lumpy material with paint	3 Chrysotile	Synthetic foam, Filler, Binder, Paint	5 Cellulose
11	40573 - 84	1	White soft lumpy material with paint	2 Chrysotile	Synthetic foam, Filler, Binder, Paint	6 Cellulose
12	40573 - 85	1	White soft lumpy material with paint	3 Chrysotile	Synthetic foam, Filler, Binder, Paint	3 Cellulose
13	40573 - 86	1	White soft lumpy material with paint	2 Chrysotile	Synthetic foam, Filler, Binder, Paint	2 Cellulose
14	40573 - 87	1	White soft lumpy material with paint	2 Chrysotile	Synthetic foam, Filler, Binder, Paint	5 Cellulose
15	40573 - 88	1	White soft lumpy material with paint	2 Chrysotile	Synthetic foam, Filler, Binder, Paint	4 Cellulose
16	40573 - 89	1	White soft lumpy material with paint	2 Chrysotile	Synthetic foam, Filler, Binder, Paint	2 Cellulose
17	40573 - 90	1	Trace off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	5 Cellulose
		2	Trace white chalky material with paper	None detected	Binder/filler Gypsum/binder	27 Cellulose
18	40573 - 91	1	Off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	2 Cellulose
		2	White chalky material with paper	None detected	Binder/filler Gypsum/binder	25 Cellulose
19	40573 - 92	1	Off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	3 Cellulose
		2	White chalky material with paper	None detected	Binder/filler Gypsum/binder	26 Cellulose
20	40573 - 93	1	Off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	4 Cellulose
		2	White chalky material with paper	None detected	Binder/filler Gypsum/binder	21 Cellulose

Analyzed by:  Heather Mummey

Report reviewed by: Steve (Fanfan) Zhang, President

SEATTLE ASBESTOS TEST, LLC

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PLM by Method EPA/600/R-93/116**

Attn.: Ms. Janet Murphy
Client: PBS Engineering and Environmental, Seattle
Address: 2517 Eastlake Ave. E., Suite 100
Seattle, WA 98102

Client Job #: 40573.064
Laboratory Batch #: 201114308
Date Received: 10/26/2011
Samples Received: 48
Date Analyzed: 10/27/2011
Samples Analyzed: 48

Project: KCHA - Meadowbrook Apts

Lab ID	Client Sample ID	Layer	Description	% Asbestos Fibers	Non-Fibrous Components	% Non-asbestos Fibers
21	40573 - 94	1	Off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	2 Cellulose
		2	White chalky material with paper	None detected	Binder/filler Gypsum/binder	24 Cellulose
22	40573 - 95	1	Off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	3 Cellulose
		2	White chalky material with paper	None detected	Binder/filler Gypsum/binder	26 Cellulose
23	40573 - 96	1	Off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	4 Cellulose
		2	White chalky material with paper	None detected	Binder/filler Gypsum/binder	28 Cellulose
24	40573 - 97	1	Off-white powdery material with paint	2 Chrysotile	Binder/filler, Paint	3 Cellulose
		2	White chalky material with paper	None detected	Binder/filler Gypsum/binder	25 Cellulose
25	40573 - 98	1	Gray paint	None detected	Paint/binder	3 Cellulose
26	40573 - 99	1	Tan foamy material with powdery material	None detected	Synthetic foam, Binder/filler	2 Cellulose
27	40573 - 100	1	Gray sandy/brittle material with fibrous material and wood debris	<1 Chrysotile	Sands, Filler, Binder, Wood Debris	4 Cellulose, Synthetic fibers
28	40573 - 101	1	Tan powdery material	2 Chrysotile	Binder/filler	3 Cellulose
29	40573 - 102	1	Tan powdery material	2 Chrysotile	Binder/filler	6 Cellulose
30	40573 - 103	1	Brown mastic	None detected	Mastic/binder, Filler	5 Cellulose
		2	Gray foamy material	None detected	Synthetic foam	None detected
31	40573 - 104	1	Brown/blue brittle/rigid material	None detected	Filler, Binder, Fine debris	67 Cellulose
		2	Brown mastic	None detected	Mastic/binder	4 Cellulose
32	40573 - 105	1	Ivory mastic	None detected	Mastic/binder, Filler	2 Cellulose
33	40573 - 106	1	Brown mastic with paper	None detected	Mastic/binder, Filler	21 Cellulose
34	40573 - 107	1	Ivory mastic	None detected	Mastic/binder, Filler	3 Cellulose
35	40573 - 108	1	Brown sheet vinyl	None detected	Vinyl/binder	None detected
		2	Gray fibrous material with mastic	50 Chrysotile	Binder/filler, Mastic/binder	35 Cellulose
36	40573 - 109	1	Tan sheet vinyl	None detected	Vinyl/binder	None detected
		2	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	71 Cellulose
		3	Gray sheet vinyl	None detected	Vinyl/binder	None detected
		4	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	67 Cellulose
		5	Off-white sheet vinyl	None detected	Vinyl/binder	None detected
		6	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	69 Cellulose
37	40573 - 110	1	Tan sheet vinyl	None detected	Vinyl/binder	None detected

Analyzed by: 
Heather Mumme

Report reviewed by: Steve (Fanvan) Zhang President

SEATTLE ASBESTOS TEST, LLC

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Seattle, WA 98102

Client Job #: 40573.064
Laboratory Batch #: 201114308
Date Received: 10/26/2011
Samples Received: 48
Date Analyzed: 10/27/2011
Samples Analyzed: 48

Project: KCHA - Meadowbrook Apts

Lab ID	Client Sample ID	Layer	Description	% Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
		2	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	70	Cellulose
		3	White tile	2 Chrysotile	Vinyl/binder, Mineral grains	2	Cellulose
		4	Black mastic	3 Chrysotile	Mastic/binder	6	Cellulose
		5	White tile	2 Chrysotile	Vinyl/binder, Mineral grains	3	Cellulose
		6	Yellow mastic	None detected	Mastic/binder	4	Cellulose
		7	White tile	2 Chrysotile	Vinyl/binder, Mineral grains	2	Cellulose
		8	Black mastic	2 Chrysotile	Mastic/binder	5	Cellulose
38	40573 - 111	1	Tan sheet vinyl	None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	68	Cellulose
		3	Gray sandy/brittle material	None detected	Sands, Filler, Binder	3	Cellulose
		4	Gray sheet vinyl	None detected	Vinyl/binder		None detected
		5	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	70	Cellulose
		6	Gray brittle material	None detected	Filler, Binder	2	Cellulose
		7	Off-white sheet vinyl	None detected	Vinyl/binder		None detected
		8	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	72	Cellulose
39	40573 - 112	1	Tan tile	2 Chrysotile	Vinyl/binder, Mineral grains	3	Cellulose
		2	Black mastic	3 Chrysotile	Mastic/binder	6	Cellulose
40	40573 - 113	1	Tan sheet vinyl	None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	69	Cellulose
		3	Gray sheet vinyl	None detected	Vinyl/binder		None detected
		4	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	73	Cellulose
		5	Off-white sheet vinyl	None detected	Vinyl/binder		None detected
		6	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	68	Cellulose
		7	Off-white sheet vinyl	None detected	Vinyl/binder		None detected
		8	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	70	Cellulose
		9	Beige sheet vinyl	None detected	Vinyl/binder		None detected
		10	Gray fibrous material	None detected	Binder/filler	67	Cellulose
		11	Black mastic	2 Chrysotile	Mastic/binder	5	Cellulose
		12	Gray sandy/brittle material	None detected	Sands, Filler, Binder	2	Cellulose
41	40573 - 114	1	Tan sheet vinyl	None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	66	Cellulose
		3	Gray sheet vinyl	None detected	Vinyl/binder		None detected
		4	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	68	Cellulose
		5	Off-white sheet vinyl	None detected	Vinyl/binder		None detected

Analyzed by:  Heather Mummev

Report reviewed by: Steve (Fanvao) Zhan President

SEATTLE ASBESTOS TEST, LLC

NVLAP Accredited - Bellevue:200876; Lynnwood:200768

Lynnwood Laboratory: 19711 Scriber Lake Rd, Suite D, Lynnwood, WA 98036; Tel: 425.673.9850, Fax:425.673.9810

Bellevue Laboratory: 12727 Northup Way, Suite 1, Bellevue, WA 98005; Tel: 425.861.1111, Fax: 425.861.1118

Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT
PLM by Method EPA/600/R-93/116**

Attn.: Ms. Janet Murphy
 Client: PBS Engineering and Environmental, Seattle
 Address: 2517 Eastlake Ave. E., Suite 100
 Seattle, WA 98102

Client Job #: 40573.064
 Laboratory Batch #: 201114308
 Date Received: 10/26/2011
 Samples Received: 48
 Date Analyzed: 10/27/2011
 Samples Analyzed: 48

Project: KCHA - Meadowbrook Apts

Lab ID	Client Sample ID	Layer	Description	% Asbestos Fibers	Non-Fibrous Components	% Non-asbestos Fibers
		6	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	70 Cellulose
		7	Tan tile	2 Chrysotile	Vinyl/binder, Mineral grains	2 Cellulose
		8	Black mastic	3 Chrysotile	Mastic/binder	5 Cellulose
42	40573 - 115	1	Tan sheet vinyl	None detected	Vinyl/binder	None detected
		2	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	67 Cellulose
		3	Gray sheet vinyl	None detected	Vinyl/binder	None detected
		4	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	71 Cellulose
		5	Off-white sheet vinyl	None detected	Vinyl/binder	None detected
		6	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	68 Cellulose
		7	Off-white sheet vinyl	None detected	Vinyl/binder	None detected
		8	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	70 Cellulose
		9	Beige sheet vinyl	None detected	Vinyl/binder	None detected
		10	Gray fibrous material	None detected	Binder/filler	72 Cellulose
		11	Black mastic	2 Chrysotile	Mastic/binder	4 Cellulose
		12	Gray sandy/brittle material	None detected	Sands, Filler, Binder	3 Cellulose
43	40573 - 116	1	Tan sheet vinyl	None detected	Vinyl/binder	None detected
		2	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	71 Cellulose
		3	Gray sheet vinyl	None detected	Vinyl/binder	None detected
		4	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	67 Cellulose
		5	White tile	2 Chrysotile	Vinyl/binder, Mineral grains	3 Cellulose
		6	Black mastic	3 Chrysotile	Mastic/binder	6 Cellulose
44	40573 - 117	1	Tan sheet vinyl	None detected	Vinyl/binder	None detected
		2	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	66 Cellulose
		3	Gray sheet vinyl	None detected	Vinyl/binder	None detected
		4	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	69 Cellulose
		5	Off-white sheet vinyl	None detected	Vinyl/binder	None detected
		6	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	70 Cellulose
		7	Tan sheet vinyl	None detected	Vinyl/binder	None detected
		8	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	72 Cellulose
45	40573 - 118	1	Tan sheet vinyl	None detected	Vinyl/binder	None detected
		2	Gray fibrous material with mastic	None detected	Binder/filler, Mastic/binder	67 Cellulose
		3	Off-white sheet vinyl	None detected	Vinyl/binder	None detected

Analyzed by: Heather Mummev

Report reviewed by: Steve (Fanvan) Zhang, President

SEATTLE ASBESTOS TEST, LLC

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Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT**
PLM by Method EPA/600/R-93/116Attn.: Ms. Janet Murphy
Client: PBS Engineering and Environmental, Seattle
Address: 2517 Eastlake Ave. E., Suite 100
Seattle, WA 98102Client Job #: 40573.064
Laboratory Batch #: 201114308
Date Received: 10/26/2011
Samples Received: 48
Date Analyzed: 10/27/2011
Samples Analyzed: 48

Project: KCHA - Meadowbrook Apts

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
		4	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	71	Cellulose
		5	Gray sandy/brittle material		None detected	Sands, Filler, Binder	3	Cellulose
46	40573 - 119	1	Tan sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	69	Cellulose
		3	Off-white sheet vinyl		None detected	Vinyl/binder		None detected
		4	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	72	Cellulose
		5	Yellow sheet vinyl		None detected	Vinyl/binder		None detected
		6	Gray fibrous material with mastic	50	Chrysotile	Binder/filler, Mastic/binder	26	Cellulose
47	40573 - 120	1	Tan sheet vinyl		None detected	Vinyl/binder		None detected
		2	Gray fibrous material with mastic		None detected	Binder/filler, Mastic/binder	70	Cellulose
		3	Off-white sheet vinyl		None detected	Vinyl/binder		None detected
		4	Gray fibrous material		None detected	Binder/filler	68	Cellulose
		5	Black mastic	2	Chrysotile	Mastic/binder	4	Cellulose
		6	Gray sandy/brittle material		None detected	Sands, Filler, Binder	3	Cellulose
48	40573 - 121	1	White brittle material with fibrous material		None detected	Filler, Binder	31	Cellulose, Glass fibers

Analyzed by: Heather Mummev

Report reviewed by: Steve (Fanvao) Zhang, President

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Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT**

PLM by Method EPA/600/R-93/116

Attn.: Ms. Janet Murphy

Client: PBS Engineering and Environmental, Seattle

Address: 2517 Eastlake Ave. E., Suite 100

Seattle, WA 98102

Client Job #: 40573.064

Laboratory Batch #: 201114386

Date Received: 10/31/2011

Samples Received: 1

Date Analyzed: 11/2/2011

Samples Analyzed: 1

Project: Meadowbrooks Apartments

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
1	122	1	White/tan tile	2	Chrysotile	Vinyl/binder, Mineral grains	2	Cellulose
		2	Brown fibrous material with yellow mastic	50	None detected	Binder/filler, Mastic/binder	36	Cellulose



Analyzed by: Michelle Gibeau

Report reviewed by: Steve (Fanyao) Zhang, President

TAB 3
Inspector Certifications

Certificate of Completion

This is to certify that

Janet Murphy

has satisfactorily completed
4 hours of refresher training as an

Asbestos Building Inspector

to comply with the training requirements of
TSCA Title II / 40 CFR 763 (AHERA)

112302

Certificate Number



Instructor

EPA Provider Cert. Number: 1085



Jun 15, 2011

Date(s) of Training

Exam Score: NA

Expiration Date: Jun 14, 2012

Certificate of Completion

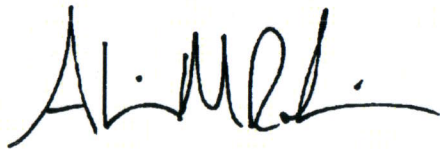
This is to certify that

Harry M. Goren

has satisfactorily completed
4 hours of refresher training as an

Asbestos Building Inspector

to comply with the training requirements of
TSCA Title II / 40 CFR 763 (AHERA)



Instructor

EPA Provider Cert. Number: 1085

110781
Certificate Number



Feb 23, 2011

Date(s) of Training

Exam Score: NA

Expiration Date: Feb 23, 2012